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COMMONWEALTH OF MASSACHUSETTS

NORFOLK, SS.

SUPERIOR COURT DEPARTMENT
OF THE TRIAL COURT

* * * * *
COMMONWEALTH OF MASSACHUSETTS
vs. Indictment No.
KAREN READ 2282CR00117
* * * * *

Day 30 - Trial with Jury
Before the Honorable Beverly Cannone

APPEARANCES:

For The Commonwealth:
BY: Adam Lally
Laura McLaughlin
Assistants District Attorney

For Karen Read:
BY: Alan Jackson
David Yannetti
Elizabeth Little
Attorneys at Law

Norfolk Superior Courthouse
Dedham, Massachusetts
Thursday, June 13, 2024

Paula M. Mills
Retired Certified Court Reporter
and Court Transcriptionist

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P R O C E E D I N G SJune 13, 2024

(Court in session at 9:07 a.m.)

(Defendant present. Jury present.)

THE CLERK: 22-117, Commonwealth versus
Karen Read.

THE COURT: Good morning, counsel. Good
morning Ms. Read. Good morning, Jurors.

I have to ask you those same three questions.
Were you all able to follow the instructions and
refrain from discussing this case with anyone since
we left yesterday?

Everyone said "yes" or nodded affirmatively.

Were you also able to follow the instructions
and refrain from doing any independent research or
investigation into this case?

Everyone said "yes" or nodded affirmatively.

Did anyone happen to see, hear, read anything
about this case since we left yesterday?

Everyone said "no" or shook their heads.

Thank you very much.

May we have Detective Lieutenant Tully,
please.

Whereupon,

BRIAN TULLY, Resuming

1 having been first duly sworn, was examined and
2 testified under oath as follows:

3 THE COURT: Whenever you are ready, Mr. Lally.

4 MR. LALLY: Thank you.

5 CONTINUED DIRECT EXAMINATION

6 BY MR. LALLY:

7 Q Good morning, sir.

8 A Good morning.

9 Q Again, if you could, please state your name
10 and spell your last name for the jury.

11 A Brian Tully, T-U-L-L-Y

12 Q Now, Lieutenant Tully, when you were
13 testifying yesterday, you were testifying in some part
14 about a search that you did in conjunction with the
15 SERT team at 34 Fairview on January 29th, 2022,
16 correct?

17 A Yes.

18 Q And, at any point in time, did you or any
19 other member of your unit conduct any search of the
20 residence at 34 Fairview Road?

21 A No.

22 Q And why not?

23 A We had no reason to believe there would be
24 evidence found within the home of 34 Fairview Road.

25 Q Now, Lieutenant, if you could, could you

1 inform the jury a little bit about sort of search
2 warrants as far as residences go and what is required
3 in Massachusetts for you to conduct a search warrant?

4 MR. JACKSON: Objection.

5 THE COURT: So we have no question.

6 MR. LALLY: That was the question. I'm sorry.

7 THE COURT: I thought it was to inform the
8 jury about search warrants.

9 MR. JACKSON: If I interrupted the --

10 THE COURT: Did you complete your question?

11 MR. LALLY: I did, Your Honor. Yes.

12 THE COURT: Well, so it's sustained, then.

13 MR. JACKSON: Thank you.

14 BY MR. LALLY:

15 Q Lieutenant, over the course of your career,
16 you've conducted search warrants of people's
17 residences, correct?

18 A Yes.

19 Q And what do you need to do that?

20 A A search warrant, consent or exigent
21 circumstance.

22 Q And, as far as a search warrant is concerned,
23 what is needed or what is necessary in order for you to
24 get a search warrant?

25 MR. JACKSON: Objection.

1 THE COURT: I am going to allow him to lay a
2 foundation. So the objection is overruled.

3 THE WITNESS: As governed by the Fourth
4 Amendment of the U.S. Constitution and Article 14
5 of the Massachusetts Constitution, law enforcement
6 is required to get a search warrant if we are going
7 to invade someone's privacy.

8 In order to obtain a search warrant, I need to
9 gather facts that I swear an oath and affirm are
10 true and accurate; that there is probable cause,
11 which means more likely than not that a specific
12 piece of evidence will be found in a specific
13 location and is related to a crime.

14 So I need to check those boxes in order to
15 obtain a search warrant through the trial court.

16 BY MR. LALLY:

17 Q And what, if any, information did you have
18 related to specific evidence of a crime in relation to
19 the interior of the residence at 34 Fairview Road?

20 A I didn't have any. When thinking about
21 residence and search warrants and evidence, I need to
22 put the evidence inside the house. And so I don't
23 believe that Mr. O'Keefe entered the home. So I had no
24 nexus to the house.

25 Q And what, if any, evidence did you have that

1 Mr. O'Keefe had ever entered the home at 34 Fairview
2 Road on January 29th or any other date?

3 A I don't. On the contrary, I have evidence
4 that he was outside, but I don't have anything putting
5 him inside the residence.

6 Q Now, you're aware or you testified yesterday
7 that at some point while you and the SERT team were
8 conducting the search at 34 Fairview, Sergeant Bukhenik
9 and Trooper Proctor were following a tow truck with the
10 defendant's vehicle from Dighton to the Canton Police
11 Department, correct?

12 A Yes.

13 Q And, in reference to taking the vehicle to the
14 Canton Police Department, how was that decision arrived
15 at and what, if any, discussion or what, if any, other
16 options did you have?

17 A So Sergeant Bukhenik and I had conversations
18 resulting in my decision of where the vehicle was going
19 to go. And so we needed to find a location that was
20 secured, indoors and preferable heated. And so we
21 started going through checklists of what's available.

22 So you start thinking, obviously, of state
23 police facilities. So between Dighton and Canton,
24 where our office is, as well, you have the Foxboro
25 barracks, which I worked out of the Foxboro barracks.

1 The garage was probably not appropriate for that large
2 a vehicle to get in there. It's an old building. I
3 worked at the state police barracks in Milton. That's
4 even worse with a smaller garage. It's attached and
5 inside of an older building.

6 So the Canton Police Department was the next
7 step. It kind of checked all of those boxes. It was
8 inside. It was secure and it was heated.

9 Q Now, over the course of your career
10 specifically within the homicide unit of the detective
11 unit of the district attorney's office, approximately
12 how many investigations have you led or been a part of
13 in relation to -- well, let me first ask you this:

14 As far as your unit is concerned, how is it
15 that -- from a staffing perspective, how is it that an
16 investigation is conducted as firearms as certain
17 roles, or can you speak a little bit about sort of the
18 roles that different people within your unit played
19 with reference to an investigation just in general?

20 A Within the unit, we have different sections.
21 We have a homicide section, narcotic section and
22 special investigations. So each is kind of broken up
23 into that. Obviously, the homicide section will
24 undertake homicide investigations, but we work as a
25 team.

1 So there will be situations where you may need
2 an all-hands-on-deck just to get some people out there.
3 So the narcotics folks will help with homicide
4 investigations and vice versa. The homicide people
5 will help with narcotics investigations when needed.

6 MR. LALLY: Your Honor, may I just have a
7 moment?

8 THE COURT: Yes.

9 BY MR. LALLY:

10 Q Now, specifically, when it comes to a death
11 investigation, there is someone who is assigned as what
12 you call a case officer; is that correct?

13 A Yes.

14 Q And can you explain to the jury what the role
15 of the case officer is and what, if any, other
16 supervision there is with reference to that case
17 officer?

18 A The case officer is essentially the central
19 collection point for the investigation. So they are
20 the person that would gather the evidence, the records,
21 hold those records. And then somebody needs to be held
22 accountable for a to-do list. A supervisor would go to
23 that one person as well as the district attorney's
24 office would know who to contact about a certain case
25 and then we go from there.

1 Obviously, that case officer is usually a rank
2 of trooper, especially when you're talking about
3 unattended deaths. They have a sergeant and two
4 lieutenants that are supervising them in that realm.

5 Q And, as far as interviews are concerned, what,
6 if any, sort of policy is there with regard to troopers
7 and how many would be involved in the interview of any
8 witness?

9 A We would always have two people present,
10 either a trooper and a local detective or two troopers,
11 one asks questions, one does note taking. It's just
12 good practice.

13 Q And, with respect to this investigation,
14 locals, as far as the Canton Police Department, was not
15 something that you utilized, correct?

16 A Correct.

17 Q And, again, I know you testified a little bit
18 about it yesterday; but, if you could, just reiterate
19 or expound upon sort of what your discussions were with
20 the chief as far as the Canton Police Department's
21 involvement in this investigation going forward
22 following the early morning hours of January 29th.

23 A Our conversation circled around in the early
24 hours about the homeowner of 34 Fairview. Brian Albert
25 has a brother, Kevin Albert, who was a detective with

1 the Canton Police Department. And so where we were, we
2 had essentially zero information about the
3 investigation. We wanted to remove any appearance of
4 conflict by not having Kevin Albert or any of his co-
5 workers involved in the investigation.

6 Q Was that in the investigation in its entirety
7 or the interviewing process, or how was that sort of
8 delineated, if at all?

9 A Definitely no interviews. They were not
10 involved in any discussion. Essentially, the entire
11 investigation.

12 Q And, as far as the case officer is concerned,
13 is the case officer someone who, particularly in a
14 homicide investigation, as far as a decision as far as
15 regarding charging, is that something a case officer
16 would be tasked with?

17 A No.

18 Q Now, turning your attention back to your
19 testimony yesterday, there were items that you had
20 retrieved from the SERT team search on January 29th,
21 correct?

22 A Yes.

23 Q And, as a precursor, if I could ask you sort
24 of over the course of your career and specifically
25 within the homicide unit with the district attorney's

1 office, about how many death investigations, homicide
2 investigations, have you been involved with?

3 A I would say in excess of 600 unattended death
4 investigations that I've personally investigated.
5 That's not counting those phone calls or the phones I
6 ended up declining that I'd mentioned yesterday.

7 In addition to that, I probably have either
8 worked or supervised 75 homicides. And then, getting
9 back to the unattended deaths, I've supervised
10 countless since I've attained the rank of trooper and
11 lieutenant -- sorry, sergeant lieutenant.

12 Q And, with respect to your training and with
13 respect to your experience, how many of those
14 investigations have involved injuries which included
15 abrasions?

16 A Probably 10 to 20 percent of them.

17 Q And, if you could, at least from your
18 experience, if you could explain to the jury what your
19 understanding of what an abrasion is?

20 MR. JACKSON: Objection.

21 THE COURT: Sustained.

22 BY MR. LALLY:

23 Q With regard to the items that you recovered on
24 January 29th, there was one piece of clear plastic, you
25 testified yesterday, that had something that you termed

1 as stippling on the outside, correct?

2 A Yeah. I might have used the word "dimples,"
3 but yes.

4 Q Now, with respect to Mr. O'Keefe, at some
5 point did you have occasion to view photographs of
6 Mr. O'Keefe from the Good Samaritan Hospital?

7 A Yes.

8 Q And, with regard to the items that you
9 recovered, what, if any, significance did you observe
10 between those items and the injuries you observed to
11 Mr. O'Keefe?

12 A The injuries to Mr. O'Keefe, I noticed the
13 abrasions had a certain pattern on them. And I know
14 that when a blunt force object is involved in causing
15 an abrasion, the characteristics of the object that
16 comes in contact with a person will often leave the
17 characteristics on that person in the form of an
18 abrasion.

19 Q And, with respect to this specific case as far
20 as any items recovered on January 29th and your
21 observations of Mr. O'Keefe, what, if anything, did you
22 observe of any significance in relation to that?

23 A I'd be comfortable in saying that the marks on
24 Mr. O'Keefe are consistent with --

25 MR. JACKSON: Objection.

1 THE COURT: Sustained.

2 BY MR. LALLY:

3 Q Now, sir, if I could turn your attention --
4 two other members of your unit are troopers by the name
5 of Trooper Dunne and Trooper Moore; is that correct?

6 A Yes.

7 Q And, on February 2nd, 2022, are you familiar
8 with them retrieving some video in relation to this
9 investigation?

10 A Yes.

11 Q And specifically from the town of Canton, did
12 they retrieve video from there?

13 A Yes.

14 Q And specifically what location did they
15 retrieve video from?

16 A From the Canton Public Library at 786
17 Washington Street.

18 Q And are you familiar with them speaking with a
19 gentleman by the name of Mr. Jutras?

20 A Yes.

21 Q And he is an IT person with the town of
22 Canton?

23 A And, as far as the timestamp with regard to
24 the video that was retrieved from the Canton Public
25 Library, what, if any, information do you have in

1 reference to that?

2 A Whenever we retrieve video, we want to ensure
3 the timestamp is accurate, is as we've learned,
4 businesses are not always great about updating the
5 timestamp. So that's always top of mind when we
6 collect video. Mr. Jutras ensured us that the
7 timestamp on the video was consistent and in realtime.

8 Q Now, the following day of February 3rd, are
9 you familiar with Trooper Moore retrieving some
10 additional surveillance video?

11 A Yes.

12 Q And where did he retrieve that video from?

13 A From Temple Beth Abraham in Canton at 1301
14 Washington Street.

15 Q Now, as far as those two locations as far as
16 the Canton Public Library and the Temple Beth Abraham,
17 are you familiar with where they are in relation to
18 each other?

19 A Yes.

20 Q Both located on Washington Street; is that
21 correct?

22 A Yes.

23 Q And about how far away from each other are
24 they?

25 A About a mile and a half.

1 Q Now, with reference to the temple video, what,
2 if any, information did you receive in regard to the
3 timestamp on that video?

4 A That that was also accurate.

5 Q Now, from each of these respective locations,
6 what time frames was Trooper Moore, in one instance,
7 and Trooper Moore and Trooper Dunne, in the other
8 instance, what time frames of video did they retrieve
9 from each of those respective locations?

10 A From 12:00 a.m. midnight to 1:00 a.m. and from
11 5:00 a.m. to 6:00 a.m.

12 Q And why was it that those were the time frames
13 -- what you had learned to that point in the
14 investigation, why were those the time frames that the
15 troopers were looking for?

16 A We had reason to believe that those were the
17 times that Ms. Read's vehicle was traveling in and
18 around that area.

19 Q We'll get to that a little bit more in a
20 moment. But, as far as reason to believe that
21 Ms. Read's vehicle was traveling in the area around
22 those times, what, if any, information did you have to
23 base that on?

24 A We had statements and video from the Waterfall
25 Bar & Grille, also on Washington Street, a little bit

1 farther down and a car departing in that direction. We
2 had information about a car that matched her
3 description arriving at 34 Fairview at a certain time
4 shortly before 12:30 a.m. And so like we always do, we
5 do a video canvass and look for video cameras from that
6 first known point, which would be the Waterfall Bar &
7 Grille to the residence at 34 Fairview and then from
8 there from 34 Fairview to One Meadows Ave., which was
9 the home of John O'Keefe.

10 Q In reference to the morning hours between 5:00
11 and 6:00 a.m., the later morning hours between 5:00 and
12 6:00 a.m., what, if any, information did you have in
13 relation to Ms. Read's travel at that time?

14 A So we had learned through interviews that she
15 was calling people as early as 4:45 in an effort to
16 locate Mr. O'Keefe with a statement that she had left
17 the house shortly after 5:00 a.m. We then know that
18 she arrived at the McCabe residence on (f) [REDACTED]
19 after 5:30. So we were trying to account for the
20 movements of the vehicle for that 30-minute block.

21 Q Now, in reference to the phone calls, you've
22 had occasion to review information related to the
23 defendant's phone?

24 A Yes.

25 Q You mentioned that about 4:45 in the morning,

1 she made phone calls trying to ascertain or allegedly
2 trying to ascertain the whereabouts of Mr. O'Keefe; is
3 that correct?

4 A Yes.

5 Q Prior to those 4:45 a.m. phone calls, were
6 there other phone calls that the defendant placed?

7 A Yes.

8 Q And to whom did she place those calls and
9 about what time?

10 A Starting at 12:33 a.m. to 6:03 a.m., there
11 were 53 phone calls from Ms. Read to a phone number
12 associated with John O'Keefe.

13 Q And, in addition to those phone calls to
14 Mr. O'Keefe's phone, what, if any, other calls did the
15 defendant make prior to those 4:45 a.m. calls?

16 A There were phone calls to her family members,
17 to Jennifer McCabe, Kerry Roberts, the Cameranos.
18 Those are the ones off the top of my head. I have the
19 notes in front of me if you want me to refer to them.

20 MR. LALLY: Your Honor, if the witness may?

21 THE COURT: Yes.

22 THE WITNESS: Would you like me to continue,

23 A.D.A. Lally?

24 BY MR. LALLY:

25 Q Yes, please.

1 A After 6:03 when Mr. O'Keefe was found, there
2 were a number of calls to members of John O'Keefe's
3 family.

4 Q Now, the phone calls to family members of her
5 own, the defendant's family members, those were
6 specifically to her mother and her father; is that
7 correct?

8 A Yes.

9 Q And did those phone calls precede the phone
10 calls to either Ms. McCabe or Ms. Roberts or anybody
11 else earlier that morning?

12 A On the call detail records, they don't appear.
13 But I know the phone dump has other information.

14 MR. LALLY: Your Honor, may I approach?

15 THE COURT: Yes.

16 BY MR. LALLY:

17 Q Lieutenant, turning your attention back to the
18 videos we were speaking about, I'm showing you a disk
19 and just ask you if you recognize that.

20 A I do.

21 Q And what do you recognize that to be?

22 A It is surveillance video from Temple Beth
23 Abraham.

24 MR. LALLY: May I approach again, Your Honor?

25 THE COURT: Yes.

1 MR. LALLY: The Commonwealth would seek to
2 introduce and admit as the next exhibit.

3 MR. JACKSON: No objection.

4 THE COURT: Okay.

5 (Whereupon, Temple Beth Abraham CD containing video
6 was entered and marked Exhibit No. 572 in
7 Evidence.)

8 THE COURT REPORTER: Exhibit 572.

9 THE COURT: Thank you.

10 MR. LALLY: May I approach again, Your Honor?

11 THE COURT: Yes.

12 BY MR. LALLY:

13 Q Showing you another document, do you recognize
14 that, sir?

15 A I do.

16 Q And what do you recognize that to be?

17 A It is a map that I created with icons of the
18 town of Canton.

19 Q And how did you create that map, sir?

20 A Using Google Earth as the mapping software, I
21 placed icons on locations within the town of Canton
22 that are relative to this investigation to provide
23 better context and illustrate the area that we are
24 going to be discussing.

25 MR. LALLY: May I approach again, Your Honor?

1 THE COURT: Yes.

2 MR. LALLY: The Commonwealth would seek to
3 introduce and admit as the next exhibit.

4 MR. JACKSON: No objection.

5 THE COURT: Okay.

6 (Whereupon, map was entered and marked Exhibit
7 No. 573 in Evidence.)

8 THE COURT REPORTER: Exhibit 573.

9 MR. LALLY: And, Your Honor, may I return
10 Exhibit 573 to the witness?

11 THE COURT: Yes.

12 MR. LALLY: And, Your Honor, with the Court's
13 permission, if I could publish that to the jury at
14 this time?

15 THE COURT: Yes.

16 BY MR. LALLY:

17 Q Now, Lieutenant, do you have the laser pointer
18 there before you?

19 A I do.

20 Q So using that laser pointer, if you could
21 direct the jury's attention to the icons that you
22 inserted in reference to various points of relevant
23 locations as well as any sort of route to travel or
24 roadways depicted in this?

25 A So each icon is a house-shaped icon that I

1 have placed at different locations. The first one is
2 red in color. It denotes where 34 Fairview Road is.
3 Starting at the bottom, there is a pinkish color one
4 that is the location of the Waterfall Bar & Grille.
5 Just north of that, you'll see a brown one which
6 denotes the Canton Public Library.

7 Following up this street here, which is
8 Washington Street, you'll come to Temple Beth Abraham
9 which is denoted by the blue icon there. And then off
10 to the right is One Meadows Lane with the green icon.

11 Q Now, as far as -- and, if you could, just
12 using that laser pointer again, denote where the temple
13 is?

14 A It is the blue icon in the center of the map.

15 Q Now, as far as where the temple is located in
16 reference to specific roadways, you mentioned it's
17 located on Washington Street, right?

18 A Yes.

19 Q And so what, if any, roads intersect with
20 Washington Street around the location of --

21 A Chapman Street is the street that runs in this
22 direction towards Washington Street. So again,
23 Washington Street is this street here. It continues
24 and stays Washington Street as it turns slightly east
25 in that direction.

1 Q And, as far as available points of
2 directionality or ways to travel roadways from the area
3 of the temple, it intersects to the area of Dedham
4 Street; is that correct?

5 A Yes.

6 Q And so as far as available routes of travel
7 from the temple to 34 Fairview, if you could denote
8 those on the map, as well?

9 A If one were at the temple and were to travel
10 to 34 Fairview, you could continue up Washington
11 Street, take the left onto Dedham Street, which is that
12 street you just mentioned, a left onto Cedarcrest and
13 to enter that neighborhood down here (indicating). One
14 could take a left and come down Chapman Street and take
15 the right to enter the neighborhood in that direction,
16 straight onto Fairview Road.

17 Q And, if you're approaching sort of from the
18 Chapman Street side of Fairview Road as you come down
19 Fairview Road, which side of the road would 34 Fairview
20 be on?

21 A Left.

22 Q And, similarly, if you're approaching from the
23 Cedarcrest side of Fairview Road and you turn onto
24 Fairview Road, which side of the street would 34
25 Fairview Road be on?

1 A Right.

2 Q Thank you, sir. Now, with respect to each of
3 these videos as far as the Canton Public Library video
4 and the temple video, these are exterior cameras; is
5 that correct?

6 A Yes.

7 Q And sort of orientation-wise, where do they
8 focus on and where are they pointed at?

9 A The ones that we focused on were the ones that
10 captured Washington Street.

11 Q Now, are you aware of another location right
12 around the area of the Temple Beth Abraham called
13 Cassies?

14 A Yes.

15 Q And that's essentially like a convenience
16 store; is that right?

17 A Yes.

18 Q And were you able to, you or other troopers
19 able to, retrieve video from that location, as well?

20 A I don't believe so.

21 MR. LALLY: Now, Your Honor, with the Court's
22 permission, if I could publish a portion of the
23 video from the Canton Public Library, which is
24 marked as Exhibit 110?

25 THE COURT: Yes.

1 MR. LALLY: And, Ms. Gilman, if you could,
2 from the first video and from the time on the
3 video, I'd ask you to go to about 12:15. If you
4 could pause it there.

5 BY MR. LALLY:

6 Q Now, again, for orientation purposes,
7 Lieutenant, using the laser pointer, if you could just
8 describe to the jury what we're sort of looking at here
9 directionality-wise and what you observe in this video?

10 A The main street in the video is Washington
11 Street. The Waterfall Bar & Grille would be off to the
12 right-hand side. And Temple Beth Abraham would be off
13 to the left. The intersecting road we are looking at
14 here is Sherman Ave., I believe.

15 Q Now, if one were to take that right, if you're
16 coming from the right of the screen to the left of the
17 screen on Washington Street heading on Sherman, and you
18 were to take that right on Sherman, where did that take
19 you?

20 A You would head towards the neighborhood that
21 One Meadow Ave. resides.

22 Q Now, were you also able over the course of the
23 investigation -- did you have occasion to look at
24 surveillance video from the Waterfall Bar & Grille,
25 itself?

1 A Yes.

2 Q And, from that video, were you able to
3 determine a time in which Mr. O'Keefe was leaving from
4 that establishment?

5 A Yes.

6 Q And what, if any, observations as far as time
7 or what, if any, observations did you make as far as
8 what Mr. O'Keefe was doing or had with him when he left
9 the bar?

10 A When he left shortly after midnight, he was
11 holding what appears to be a clear glass container.

12 Q And do you recall which hand he was holding it
13 in?

14 A His right.

15 Q And, specifically, that was about 12:11 a.m.;
16 is that correct?

17 A Yes.

18 MR. LALLY: Ms. Gilman, if you could, I am
19 going to ask you to press "play" here and then
20 pause again at 12:15:58.

21 (Whereupon, the video is played and paused.)

22 Q Now, looking up at the screen now where it is
23 paused at 12:15:58, Lieutenant, what, if anything, do
24 you observe there?

25 A I observe a large, black SUV here on

1 Washington Street.

2 Q And the large, black SUV that you observed, is
3 that consistent with what you observed of the
4 defendant's vehicle?

5 A Yes.

6 Q If you could describe to the jury as far as
7 when I asked Ms. Gilman to press "play," what is that
8 vehicle going to do?

9 A It's going to continue north on Washington
10 Street through the intersection of Sherman and continue
11 north on Washington Street.

12 Q And what, if anything, is sort of in that
13 directionality as it continues off of the screen to the
14 left?

15 A It would be heading towards Temple Beth
16 Abraham.

17 MR. LALLY: Ms. Gilman, if you could?

18 (Whereupon, the video is played.)

19 MR. LALLY: Ms. Gilman, you can pause it
20 there.

21 (Whereupon, the video is paused.)

22 Q Now, with respect --

23 MR. LALLY: Your Honor, with the Court's
24 permission, if I could publish portions of the
25 temple video?

1 THE COURT: Yes.

2
3 MR. LALLY: And just continuing, my intention
4 would be to sort of go back and forth if that's all
5 right with the Court?

6 THE COURT: Yes.

7 MR. LALLY: May I have one moment, Your Honor?

8 THE COURT: Yes.

9 MR. LALLY: And if you could pause there.
10 Thank you.

11 (Whereupon, the video is paused.)

12 BY MR. LALLY:

13 Q Again, for orientation purposes, Lieutenant,
14 if you could describe, using the laser pointer there,
15 what we are looking at in this particular camera angle
16 and shot as far as the roadway?

17 A This is an exterior camera from Temple Beth
18 Abraham at 1301 Washington Street. Where it's paused
19 now at 12:01, I believe is the timestamp, you see a
20 vehicle here. That vehicle is traveling on Washington
21 Street. We are now on the other side of Washington
22 Street, looking at it, than we were from the library.
23 So south and towards the Waterfall, and the library
24 would be off to the left. North would be off to the
25 right.

1 MR. LALLY: Ms. Gilman, if you could fast
2 forward to 12:17.

3 (Whereupon, the video is played.)

4 MR. LALLY: And if you could pause it.

5 (Whereupon, the video is paused.)

6 Q Now, as far as the time concerns, the video,
7 the prior video from the library, was about 12:15 a.m.
8 when you saw the vehicle consistent with the
9 defendant's pass by that location?

10 A Yes.

11 Q And so as far as this time that's up here now,
12 approximately 12:17 or so or somewhere within that
13 minute between 12:17 and 12:18, is that consistent with
14 the time it would take to travel from where the library
15 is on Washington Street to where the temple is on
16 Washington Street?

17 A Yes.

18 Q And, from this particular time period, around
19 12:17, between the minute of 12:17 and 12:18, what, if
20 anything, did you observe of significance with
21 reference to this investigation on this portion of this
22 video?

23 A At approximately 12:17:56, you will see a
24 large, black SUV travel from left to right on the
25 screen which, again, would be northbound.

1 Q And, again, left to right on the screen just
2 for orientation purposes, what is in the direction from
3 left to right on the screen as far as any significance
4 to this case?

5 A As you continue north on Washington Street,
6 you would -- I believe the next intersection on the
7 left is Dedham Street, which one could take to get to
8 34 Fairview Road.

9 MR. LALLY: Ms. Gilman, if you could, and I
10 would ask you again to pause it at 12:17:56.

11 (Whereupon, the video is played and paused.)

12 Q And, again, Lieutenant, directing your
13 attention to the screen and, if you could, using the
14 laser pointer, direct the jury's attention to what, if
15 anything, of significance you observe in this portion
16 of the video at 12:17:56 from the Temple.

17 A A large, black SUV traveling northbound on
18 Washington Street.

19 Q And the large, black SUV, is that consistent
20 with the large, black SUV that you observed in the
21 prior video, Exhibit 110, from the Canton Public
22 Library?

23 A Yes.

24 Q Is that also consistent with what you observed
25 as far as your personal observations of the defendant's

1 vehicle?

2 A Yes.

3 MR. LALLY: Ms. Gilman, if you could please
4 press "play."

5 (Whereupon, the video is played.)

6 MR. LALLY: Ms. Gilman, you can pause that and
7 take that down please.

8 (Whereupon, the video is paused.)

9 MR. LALLY: Ms. Gilman, if I could ask you for
10 the Canton Public Library video again. And, from
11 this, I'm going to ask from the second video.

12 Q Now, Lieutenant, directing your attention to
13 up on the screen, this is the Canton Public Library
14 video, again, Exhibit 110?

15 A Yes.

16 Q As far as this is the time frame that you
17 were talking about before, between 5:00 a.m. and 6:00
18 a.m., that Troopers Dunne and Moore retrieved from
19 Mr. Jutras, correct?

20 A Yes.

21 Q And, with reference to as far as the
22 conditions outside at this particular time, between
23 5:00 and 6:00 a.m., what, if anything, do you observe
24 in this video?

25 A The ground is now covered in snow.

1 MR. LALLY: And, Ms. Gilman, if I could ask
2 you to fast forward to about 5:11 a.m. and pause it
3 there.

4 (Whereupon, the video is paused.)

5 Q Now, Lieutenant, from this portion of this
6 video from the Canton Public Library, what, if
7 anything, of significance did you observe in this
8 portion of the video relevant to this investigation?

9 A You observe a large, black SUV take a left
10 from Sherman Street onto Washington Street, heading
11 south.

12 Q And, as far as the directionality from where
13 that vehicle came from and the directionality of where
14 that vehicle is heading toward, what, if any, of the
15 locations of significance are located in those areas?

16 A So again, Sherman Street or Ave. goes straight
17 to One Meadows. So if one were to travel from Meadows
18 Ave., the residence of John O'Keefe, to this location
19 here, you would come down Sherman and you could take a
20 left onto Washington Street to head south.

21 Q And, as far as south on Washington Street,
22 again, off to the right of the screen, what, if any,
23 locations of significance in this case are located in
24 that direction?

25 A The Waterfall Bar & Grille.

1 Q Now, as far as the black SUV that you observe
2 in this video, again, is that consistent with the black
3 SUV you observed in the Temple video from 12:17 a.m.?

4 A Yes.

5 Q Is it also consistent with the black SUV that
6 you observed in the library video from 12:15 a.m.?

7 A Yes.

8 Q And is it also consistent with the defendant's
9 black SUV?

10 A Yes.

11 Q Now, with reference to -- are you familiar
12 with Mr. O'Keefe's home having Ring cameras affixed to
13 it?

14 A Yes.

15 Q And are you familiar with a video from those
16 Ring cameras depicting the defendant backing the black
17 SUV out of Mr. O'Keefe's garage at approximately 5:07
18 a.m.?

19 A Yes.

20 Q And, from that, as far as distance or time it
21 would take to travel from Mr. O'Keefe's residence to
22 this intersection covered by the Canton Public Library
23 from 5:07 to 5:11 now depicted on the screen, is that
24 consistent with the time it would take to drive that,
25 particularly given the conditions?

1 A Yes.

2 MR. LALLY: Ms. Gilman, if you could please
3 press "play."

4 (Whereupon, the video is played.)

5 MR. LALLY: Ms. Gilman, if you could pause
6 that.

7 (Whereupon, the video is paused.)

8 MR. LALLY: Now, Ms. Gilman, if you could fast
9 forward to about 5:15:30 and pause there, please.

10 Q Now, Lieutenant, between the time frames of
11 5:11 a.m. and 5:15 a.m., at any point in time do you
12 observe the black SUV traveling back in the other
13 direction?

14 A Yes.

15 Q Okay. And specifically around 5:15 and 51
16 seconds, what, if anything, did you observe on this
17 video of significance or relevance to this
18 investigation?

19 A A large, black SUV will appear on the screen
20 on the right-hand side and travel to the left-hand side
21 which, again, would be traveling north on Washington
22 Street.

23 Q Now, as far as, again, directionality, north
24 on Washington Street to the left of the screen would be
25 towards the temple; is that correct?

1 A Yes.

2 Q And, as far as the operating as far as
3 directionality is concerned, what you observed in this
4 area from 5:15 a.m., is that consistent with what you
5 observed on the Canton Public Library video earlier at
6 12:15 a.m.?

7 A Yes.

8 Q And, again, as far as the black SUV that you
9 observe in this, it's consistent with all the other
10 black SUVs you observed in the video and the
11 defendant's vehicle, correct?

12 A Yes.

13 MR. LALLY: And, Ms. Gilman, if you could
14 press "play."

15 (Whereupon, the video is played.)

16 MR. LALLY: If you would pause there.

17 (Whereupon, the video is paused.)

18 Q And, Lieutenant, using the laser pointer you
19 have before you, direct the jury's attention to where
20 you observed the black SUV?

21 A Here on Washington Street, near the
22 intersection.

23 Q Again, using that laser pointer, if you could,
24 just indicate to the jury as far as directionality
25 where this vehicle was going.

1 A North would be to the left-hand side of the
2 screen towards Temple Beth Abraham.

3 MR. LALLY: Ms. Gilman, if you could press
4 "play" again.

5 (Whereupon, the video is played.)

6 MR. LALLY: And if you could pause there.
7 Ms. Gilman, you can take this one down.

8 Now, Ms. Gilman, if I could ask for the Temple
9 Beth Abraham video again.

10 And, Your Honor, may I have just one moment?

11 THE COURT: Yes.

12 MR. LALLY: If you could pause there,
13 Ms. Gilman. For the record, this is from the
14 Temple Beth Abraham video. This is from the period
15 of 5:10 a.m. to 5:20 a.m., which is the second
16 video listed down within those.

17 BY MR. LALLY:

18 Q Now, Trooper, with regard to this video, at
19 some point around 5:18 a.m., what, if anything, did you
20 observe of significance or relevance to this
21 investigation from that period of the video?

22 A A large, black SUV travel left to right on the
23 screen.

24 Q And, again, as far as directionality, where
25 would that vehicle have been coming from and where

1 would that vehicle be heading toward?

2 A The left side of the screen would be in the
3 direction of the Canton Public Library and the
4 Waterfall Bar & Grille. Off to the right, again, would
5 be the intersection with Dedham Street which one could
6 take to 34 Fairview.

7 Q And, as far as directionality with reference
8 to the earlier video from 12:17 a.m. from the Temple
9 Beth Abraham, is the directionality consistent in this
10 video with what you observed at 12:17 a.m.?

11 A Yes.

12 MR. LALLY: Now, Ms. Gilman, if you could play
13 it from 5:18.

14 (Whereupon, the video is played.)

15 MR. LALLY: Pause it there, please.

16 (Whereupon, the video is paused.)

17 Q And, Lieutenant, what, if anything, do you
18 observe in this portion of the video relevant to this
19 investigation?

20 A A large, black SUV traveling north on
21 Washington Street.

22 Q And, again, is that large, black SUV that you
23 observe here consistent with the large black SUV you
24 observed in the prior videos and also consistent with
25 the defendant's vehicle?

1 A Yes.

2 MR. LALLY: And, Ms. Gilman, if you could
3 please press "play" again.

4 (Whereupon, the video is played.)

5 MR. LALLY: Thank you, Ms. Gilman. You can
6 take that down. Mr. Officer, we can have the
7 lights back up.

8 MR. LALLY: Your Honor, if I could just have a
9 moment?

10 THE COURT: Sure.

11 BY MR. LALLY:

12 Q Now, Lieutenant, through the course of your
13 investigation, are you familiar with what time it was
14 that the -- approximately what time it was that the
15 defendant arrived at Ms. McCabe's home?

16 A 5:35 approximately.

17 Q And Ms. McCabe's home is located on (f) [REDACTED]
18 [REDACTED]; is that correct?

19 A Yes.

20 Q Now, from the directionality of that vehicle
21 in the 5:18 video, as far as timing is concerned, 5:18
22 to about 5:35 or so, is that consistent with the time
23 it would take to drive from that area of the Temple
24 Beth Abraham to Ms. McCabe's residence on (f) [REDACTED]?

25 A No, not if you were to drive directly there.

1 Q And so to that point as far as what about that
2 time doesn't match up? Is it too short, too long or
3 something else?

4 A It would take you must quicker to get there.
5 It's about a mile and a half from Temple Beth Abraham
6 to (f) . You would continue north on
7 Washington Street and just take a left into the (f)
8 neighborhood. So the time to travel, a mile and a
9 half.

10 Q And from sort of the distance between either
11 that temple video and either 34 Fairview Road or
12 (f) , were you able to find, locate or retrieve
13 any surveillance video in those areas that would
14 capture the vehicle?

15 A No.

16 Q Now, as far as -- you had mentioned earlier in
17 your testimony when we were talking about the earlier
18 12:17 a.m. portion from the Temple Beth Abraham video.
19 The directionality of that black SUV both at 12:17 and
20 the 5:18, where is Fairview Road in relation to the
21 directionality of the SUV that you observed there?

22 A That SUV could take a left onto Dedham Street
23 and then a left onto Cedarcrest to enter down to
24 Fairview Road.

25 Q And, from your knowledge of the area as far as

1 travel is concerned, from 5:18 to about 5:35 or so,
2 would that allow for sufficient time to go from where
3 it's viewable on the Temple Beth Abraham video for the
4 vehicle to then travel to 34 Fairview Road and then
5 travel to [REDACTED] (f) [REDACTED]?

6 A Yes.

7 Q Now, I believe you had mentioned earlier in
8 your testimony that at some point there were call
9 detail records that were obtained in reference to the
10 defendant's phone?

11 A Yes.

12 Q And can you explain to the jury as far as --
13 let me ask you this first. With regard to call detail
14 records, with regard to phones in general, what, if
15 any, specialized training have you received or have you
16 given in reference to those areas of focus?

17 A I've received over 200 hours of training
18 relative to obtaining and using call detail records and
19 cell phone data in furtherance of criminal
20 investigations. Most recently, I've given talks and
21 seminars about the topic, and I've testified in
22 numerous courts around the Commonwealth about the
23 topic.

24 Q Now, can you explain to the jury sort of call
25 detail records, what they are and how you would use

1 them as far as utility and, generally speaking, in
2 reference to investigations?

3 A Call detail records are business records held
4 by cell phone companies specifically to this matter
5 that are created in the normal course of business
6 typically you think about in a billing context. So if
7 you think of your own cell phone bill, it would contain
8 information like the date and time a communication
9 occurred, the other phone number in which you
10 communicated with, the duration of the call. That sort
11 of bits of information.

12 Obviously, as we are doing a criminal
13 investigation, it is helpful to know with whom someone
14 was communicating.

15 Additionally, the cell phone companies
16 memorialize other bits of information specific to what
17 we refer to as CSLI, cell site listing information.
18 They tell us the antennas that were used during the
19 communication usually just in the form of the first
20 antenna and the last antenna.

21 There are other engineering records that we
22 can obtain that can be helpful when trying to determine
23 where the handset, cell phone, was at any given time.

24 Q And the handset that you refer to is
25 essentially the phone, itself, correct?

1 A Yes.

2 Q And, with relation to the handset and its
3 connection to antennas or towers, can you speak a
4 little bit about that based on your training and
5 experience with reference to how the handset sort of
6 communicates with an antenna and how it gets to a
7 specific antenna?

8 A Cell phone companies place antennas all around
9 to help facilitate communication. You can think of a
10 cell phone really as a two-way radio. It's sending and
11 receiving radio waves. So in order to facilitate that,
12 cell phone companies place these antennas all around.
13 Traditionally, you can think of them on a tower, but
14 they can also be on a place on the side of buildings or
15 disguised as trees or just on the top of light poles.
16 So they are all around, but you don't quite know it.

17 As far as how the handset communicates with
18 the antenna, there are different variables that go into
19 that. Now, the cell phone wants to connect to the
20 antenna with the strongest signal. The best predictor
21 of a strong signal is distance. So the further a radio
22 wave travels, the more it's going to degrade and not be
23 as strong. But there are other factors that can
24 degrade or reduce the strength of a radio wave,
25 specifically, an obstruction.

1 If you are in a basement of a building or
2 standing behind a large brick wall, the radio waves
3 aren't going to penetrate that as well. But even
4 things like precipitation or foliage on a tree can also
5 hinder it. When you think about rolling hills here in
6 Massachusetts and tall buildings, they can also disrupt
7 radio waves.

8 Q Now, as far as that sort of disruption of
9 radio waves, are you familiar with certain areas that
10 get sort of termed as a dead zone?

11 A Yes.

12 Q And can you explain what your understanding of
13 that term is as it relates to what you've been talking
14 about as far as the handset communicating with the
15 antenna?

16 A I would define a dead zone as an area where
17 there is not good cell phone coverage. So the antennas
18 are not covering that area for whatever reason,
19 obstruction, the density of the tower. Oftentimes --
20 well, an antenna can only handle so many cell phones at
21 a time. It's an idea that we coin or refer to as load.
22 So there's only a certain number of devices that can
23 handle an antenna.

24 My best analogy of that is Gillette Stadium.
25 I have worked the Gillette Stadium detail many times.

1 We have roll call for Patriots game early in the
2 morning. I take my post. I have strong functionality
3 on my cell phone.

4 As hundreds of thousands of devices are now
5 entering the area around Gillette Stadium, the
6 functionality of my cell phone reduces as more devices
7 are using the antennas in that area.

8 Q Now, with respect to the cell phone companies,
9 themselves, they create or utilize this data for their
10 own business purposes, correct?

11 A Yes.

12 Q And can you just briefly explain a little bit
13 about sort of what the cell phone companies would be
14 using that's kind of data forward as far as what you're
15 talking about, connections to antennas and towers?

16 A It's a company who wants to make money. So
17 it's gong to memorialize things to build the customers
18 appropriately. They are also required by the FCC to
19 keep for a certain period of time certain records
20 because they are a communications provider. So there
21 are some requirements, regulatory, that they need to
22 fulfill.

23 Q Now, as far as the information that you're
24 able to glean from these call detail records, I believe
25 you've spoken a little bit about it. But as far as

1 what, if any, limitations are there with reference to
2 the information you're able to glean from the records?

3 A Well, the overarching one is I can only get
4 what I get. So whatever the company sends me, that's
5 what I can use in my determinations. The next step is
6 when we're talking about antennas. I will never --
7 I'll have difficulty saying exactly where a cell phone
8 was when using an antenna. I can make generalizations
9 that the phone is going to be in the area of the
10 antenna. But I would never, with just that specific
11 information, be able to tell you exactly where it is.

12 I can look at other records like engineering
13 records where especially now with 4G and 5G technology,
14 the cell phone providers need to know how far away a
15 handset is from the antenna in order to facilitate that
16 communication. And they keep those ranging records for
17 me. So if I can obtain those records, I can then place
18 a much narrower area where a cell phone would have been
19 during a time period.

20 Q Now, in reference to this investigation, there
21 was a search warrant that Trooper Proctor did with
22 regard to call detail records from Ms. Read's phone,
23 correct?

24 A Yes.

25 Q And were you able or did you have occasion to

1 look at those call detail records?

2 A Yes.

3 MR. LALLY: Your Honor, may I approach?

4 THE COURT: Yes.

5 MR. LALLY: Your Honor, may we approach
6 sidebar briefly?

7 THE COURT: Yes.

8 (Whereupon, there was a sidebar conference as
9 follows:)

10 MR. LALLY: Your Honor, my apologies for not
11 handling this earlier, but there is Ms. Read's cell
12 number here. All I'm going to ask for is the last
13 four digits. At this point, what I would say is if
14 I could mark it for identification subject to
15 redaction and then mark it as an exhibit if that's
16 acceptable.

17 MR. JACKSON: I have no problem with that.

18 THE COURT: Okay. Well, can he just take a
19 Sharpie and black it out and take less time?

20 MR. LALLY: Sure.

21 THE COURT: All right. Do you have a Sharpie?

22 MR. LALLY: Ms. McLaughlin has one.

23 THE COURT: Is there an objection to this
24 coming into evidence?

25 MR. JACKSON: I need to take a quick glance at

1 it. I think I know what it is.

2 THE COURT: The unnecessary noise.

3 MR. JACKSON: I'm sorry.

4 THE COURT: Thank you.

5 (Whereupon, the sidebar conference concluded.)

6 MR. LALLY: Thank you, Your Honor. May I
7 approach the witness? Yes.

8 BY MR. LALLY:

9 Q I'm showing you a four-page document. I'd ask
10 you to just look at that and look up when you're
11 finished.)

12 A (Witness complies.)

13 Q Do you recognize that document, sir?

14 A Yes.

15 Q What do you recognize it to be?

16 A It's a subscriber information for the phone
17 number ending in 9554.

18 Q And, through the course of your investigation
19 as far as that phone number ending in 9554, who, if
20 anyone, did you find that number to be associated with?

21 A The defendant, Karen Read.

22 Q Now, with respect to the documents before you,
23 that has some listing of account information, is that
24 correct?

25 A Yes.

1 Q Who is listed as a subscriber for that account
2 with the phone number ending in 9554?

3 (Whereupon, the answer, following question and
4 answer is ordered sealed by the Court.)

5 MR. LALLY: May I approach, Your Honor?

6 THE COURT: Yes.

7 MR. LALLY: The Commonwealth seeks to
8 introduce and admit as the next exhibit.

9 MR. JACKSON: No objection.

10 THE COURT: All right.

11 (Whereupon, call records Re: 9554 was entered and
12 marked Exhibit No. 574 in Evidence.)

13 THE COURT REPORTER: Exhibit 574.

14 THE COURT: I'm actually going to see counsel
15 at sidebar for just a minute.

16 (Whereupon, there was a sidebar conference as
17 follows:)

18 THE COURT: Ms. Little and I looked at each
19 other and clearly caught the address at the same
20 time.

21 MR. JACKSON: And so did I.

22 THE COURT: Please don't use it again. We
23 will redact it from these. I'm mindful that the
24 exhibits go to the press. Okay?

25 MR. JACKSON: Your Honor, I would ask that

1 that portion of -- I don't know how difficult it
2 is, but that that portion of the transcript should
3 be sealed. She still lives at that address and he
4 just blurted it out.

5 THE COURT: So the transcript is made for
6 purposes of appeal. For the purpose of keeping
7 this record, nobody is getting a transcript of this
8 case.

9 MR. JACKSON: Oh, so the press can't get the
10 transcripts?

11 THE COURT: No.

12 MR. JACKSON: If that's the case, then I'm not
13 worried about it. I'm just worried about it being
14 --

15 THE COURT: The press won't get that part of
16 the transcript.

17 MR. JACKSON: Okay. That's my preference.

18 THE COURT: Ms. Little -- I know. I
19 understand, and we had it here. So it wasn't --
20 it's regretful that it happened.

21 MR. JACKSON: And it was a leading question.
22 I didn't know it was coming until it was already
23 too late.

24 THE COURT: I saw. You were doing other
25 things. I don't blame you. That's fine. But it's

1 only four pages and he just looked at it a minute
2 ago. I understand these things happen.

3 MR. JACKSON: Right.

4 THE COURT: But I'm not going to do anything,
5 draw any attention to it at this point.

6 MR. JACKSON: That's fine.

7 MR. LALLY: My apologies, Your Honor. It was
8 certainly not my intention.

9 THE COURT: No. I understand. Nobody is
10 suggesting it was, Mr. Lally. So why don't we --

11 MS. LITTLE: I can do it and hand it back up
12 to the Court.

13 THE COURT: That's fine.

14 MR. JACKSON: Thank you.

15 MR. LALLY: Thank you, Your Honor.

16 (Whereupon, the sidebar conference concluded.)

17 THE COURT: Did we mark that?

18 THE COURT REPORTER: Yes, Your Honor.

19 THE COURT: Thank you. So that's 574?

20 THE COURT REPORTER: Five seventy-four.

21 THE COURT: Thank you. All right. Go ahead,
22 Mr. Lally.

23 MR. LALLY: Thank you, Your Honor.

24 BY MR. LALLY:

25 Q Now, as far as the information that you

1 received with reference to call detail records, is
2 there a section called a records key?

3 A Yes.

4 Q And can you explain to the jury what a records
5 key is and how you use that in order to facilitate or
6 read the records?

7 A The records key give us the definitions of
8 terms that are used in the record. So the record comes
9 usually in the form of a spreadsheet or a PDF. You'll
10 get columns and rows. The columns will be names of
11 certain things, and those titles are often specific to
12 the company. So I want to make sure that I'm reading
13 and understanding what the data is.

14 Q Now, I believe you alluded to it earlier in
15 testimony, but just for the jury edification, if you
16 could, describe to the jury what your understanding of
17 the term as far as "cell site listing information" and
18 how that's used in an analysis of call detail records.

19 A CSLI is referred to as that billing
20 information, time, date, duration, other phone number,
21 and it has the antenna used during the communication.
22 So just as it says, it's a cell cite, which is another
23 term for antenna, as I usually use.

24 Q Now, sir, through your training and
25 experience, are you familiar with the term in reference

1 to this type of material called ranging data?

2 A Yes.

3 Q Can you explain to the jury what you
4 understand that term to mean and how it's used in
5 interpretation of call detail records?

6 A So the ranging data goes back to the
7 engineering reports I mentioned earlier. That can
8 provide more information. They can tell me the
9 antennas that were used during communication. It can
10 tell me the range in which the handset was away from
11 the antenna.

12 So now opposed to just kind of making general
13 determinations of whether a handset was near an
14 antenna, I now have a range. So I will plot the
15 location of the antenna, measure out that distance and
16 draw an arc with that radius of the distance on a map.
17 I can make an assumption that the handset is somewhere
18 on that arc.

19 The ranging data is also helpful because the
20 user does not needs to be actively using the phone in
21 order for our record to be created. The billing record
22 is going to be a phone call made and received, text
23 messages made and received.

24 A cell phone, as it sits today, is still
25 communicating with the antenna. You're getting

1 notifications. It's checking email. It's updating.
2 Because it's utilizing the network, your cell phone
3 provider is capturing that data and it's generating a
4 record even though unbeknownst to the user.

5 Q Okay. So to that point or illustrative of
6 that point, so if I'm standing right here with the cell
7 phone in my pocket, not using it, not turning it on,
8 not activating it in any way, that cell phone is still
9 doing some sort of communication with the closest or
10 some antenna within the vicinity?

11 A Yes.

12 Q Now, are you also familiar with a term called
13 UTC or Universal Time Code?

14 A Yes.

15 Q And can you explain to the jury what that term
16 means and how it relates to these types of records?

17 A So UTC are now known as coordinated universal
18 time, is the time zone along prime meridian. So if you
19 think of the globe, you've got longitude and time
20 zones. The prime meridian is a spot that runs through
21 Western Europe and Western Africa. That is the line in
22 which all time zones around the world is predicated.

23 And UTC would be a time there, and it's not
24 determined by Daylight Savings Time, either. So all
25 those time zones, like I said, around the globe are

1 predicated on that.

2 Because it's one standard time in a globe, a
3 lot of records will come in UTC time and you have to
4 make the conversion. And they will provide records,
5 specifically to a cell phone, what time it was locally,
6 but it will tell me what the UTC time was. So for me
7 to figure out what the time was locally during the time
8 of the communication, I've got to do the conversion.

9 Q And to that point as far as the conversion is
10 concerned, what type of conversion are we talking
11 about?

12 A Here on the eastern side of the United States,
13 it's minus four hours during the summer and minus five
14 in the winter.

15 Q Now, as far as these records are concerned,
16 what, if any -- I believe you spoke a little as far as
17 the arc and plotting them. But, if you could, expound
18 on that as far as explain to the jury what it is
19 exactly you're able to do with the information from the
20 call detail records as far as a visual representation.

21 A You said two things there, so I want to make
22 sure I answer the question right. You mentioned
23 ranging data but CSLI. So specific to the engineering
24 report in ranging or CSLI?

25 Q Let's first start with the CSLI.

1 A So with the CSLI, I will place on a map the
2 location of the antenna. I mentioned load a little
3 bit, but that load factor determines on how dense the
4 antennas will be from -- placed by the provider.

5 So if you think of an urban environment,
6 there's more cell phones. There's more devices that
7 need antennas. So the location of the antennas will be
8 more dense. I've seen them as close as 100 yards away
9 from each other in an urban environment. If you come
10 out to the suburbs, there are less devices. The
11 company is going to put less antennas because they
12 don't want to put them up where they don't need to.
13 They are going to be further away.

14 So in Norfolk County, the antennas are placed
15 anywhere from a mile to four or five miles apart.

16 Q And so there would be a difference as far as
17 the amount of antennas and the amount of towers like,
18 say, in the town of Canton versus downtown Boston?

19 A Yes.

20 Q And, again, I think it's pretty clear. But
21 which of those two as far as downtown Boston or the
22 town of Canton would have more antennas and more towers
23 for a cell phone to connect to?

24 A Downtown Boston would have more.

25 Q And so with relation to the number of antennas

1 or towers that a handset or a cell phone could connect
2 to, what, if any, relation does that have to geographic
3 location or what you're able to glean in reference to
4 geological location from the call detail records?

5 A Once I place the antenna on a map, I will look
6 at where the other antennas are. And I can make a
7 general determination that the cell phone was closer to
8 that antenna than other antennas. Again, there's the
9 caveat, and I'll say it up front, is that there are
10 other mechanisms that could prevent it from connecting
11 with the closest tower. But generally, it's going to
12 connect to that closest tower.

13 Now, again, there are redundancies built into
14 the system. If an antenna goes down because it gets
15 struck by lightening or it needs service, there are
16 other antennas nearby that can cover an area.

17 Q Now, with respect to the CSLI data, were you
18 able to do that in this case as far as plotting that on
19 a visual representation on a map?

20 A Yes.

21 MR. LALLY: Your Honor, may I approach?

22 THE COURT: Yes.

23 BY MR. LALLY:

24 Q Sir, I'm showing you I believe it's a 10-page
25 document and just ask you to review that and look up

1 when you're finished.

2 A (Witness complies.)

3 Q And do you recognize that, sir?

4 A Yes.

5 Q What do you recognize that to be?

6 A It's a series of maps that I created depicting
7 the records obtained from that number ending in 9554.

8 Q And that's plotted onto sort of a Google image
9 or a Google Earth image?

10 A I used Google Earth to create the maps. I
11 then take a screenshot and place it typically in
12 PowerPoint in order to make it look nice.

13 MR. LALLY: May I approach, Your Honor?

14 THE COURT: Yes.

15 MR. LALLY: The Commonwealth would seek to
16 introduce and admit as the next exhibit.

17 MR. JACKSON: No objection, Your Honor.

18 (Whereupon, map was entered and marked Exhibit
19 No. 575 in Evidence.)

20 THE COURT REPORTER: Exhibit 575.

21 THE COURT: Thank you.

22 MR. LALLY: May I return that to the witness,
23 Your Honor?

24 THE COURT: Yes.

25 MR. LALLY: May I have a moment, Your Honor?

1 THE COURT: Yes.

2 BY MR. LALLY:

3 Q So, Lieutenant, directing your attention to
4 the second page therein --

5 MR. LALLY: And, Your Honor, with the Court's
6 permission if I could publish this to the jury?

7 THE COURT: Okay.

8 BY MR. LALLY:

9 Q So, Lieutenant, do you recognize now what's
10 depicted now up on the screen?

11 A Yes.

12 Q And, again, what do you recognize this to be?

13 A It is a map that I created using the
14 information from the call details records or CSLI from
15 that account.

16 Q And from what time period of call detail
17 records are we looking at in this particular
18 representation?

19 A From 12:33 a.m. to 12:34 a.m. Again, I had
20 done the conversion for the purposes of making this
21 exhibit. So if one were to look at the call detail
22 records, you may see the UTC time. For the
23 convenience, I've done the conversion for purposes of
24 the exhibit.

25 Q Now, sir, if you could, using the laser

1 pointer before you, direct the jury's attention to
2 what, if anything, of significance that you plotted out
3 and put into this visual representation?

4 A So first we are looking at the area of the
5 town of Canton. I placed different landmarks again to
6 give context to what we are talking about here. You
7 see 34 Fairview Road as a yellow house icon, One
8 Meadows Ave., Canton, as a darker color, and the
9 Waterfall Bar & Grille as another icon.

10 Now, off to the left just west of Route 95,
11 which you'll see running here, you'll see a red
12 triangle which I use consistently as the antenna, and a
13 series of numbers and letters next to them. So next to
14 them is the numbering system that Verizon assigns to
15 that antenna. So in this instance, we are looking at
16 eNB, which is the antenna acronym, specifically, 57171.

17 Q To be clear, as far as that marking with the
18 red triangle and the eNB-ID57171, that is the antenna
19 that the handset or the defendant's cell phone is
20 connecting to at that point, correct?

21 A Yes. And I always try to be clear that that
22 is the antenna. That's not where I'm saying the
23 handset was.

24 Q So the handset is somewhere in that vicinity
25 based on your training and experience; is that correct?

1 A Yes.

2 MR. LALLY: Ms. Gilman, if we could have the
3 next slide.

4 Q And, sir, what time period are we looking at
5 in this particular representation?

6 A 12:35 to 12:37 a.m.

7 Q And, again, if you could, using the laser
8 pointer before you, direct the jury's attention to
9 what, if any, significance or relevance did you depict
10 in this representation?

11 A Those same icons appear as about the locations
12 relative to this investigation. You will see another
13 red triangle here close to Route 95 which is eNB-
14 ID57286. And, during this time period, the handset
15 associated with this account communicates with that
16 antenna.

17 Q And, from the locations significant to
18 relevance as far as eNB-ID57286, which of them is the
19 closest to in this depiction?

20 A It's just north of 34 Fairview Road.

21 Q And now if I could direct your attention to
22 the next one.

23 MR. LALLY: Ms. Gilman, if I could have the
24 next slide?

25 Q And, Lieutenant, what time frame are we

1 looking at in this slide?

2 A This comes from one call that occurred at
3 12:38 a.m.

4 Q And, as far as if you could, again, use the
5 laser pointer and direct the jury's attention to what,
6 if any, other locations you identified or signified in
7 this representation?

8 A Again, same icons for the south, the bottom.
9 The antenna is located here at the intersection of
10 Route 93 and 138, and it's eNB-ID57021.

11 Q And, of those locations of interest that you
12 signified within this slide, where is eNB-ID57021 in
13 relation to those?

14 A If you think back to the previous slide, so
15 now we have moved a little bit further east. Here is
16 Fairview Road and here is One Meadows Ave.

17 Q If I could direct your attention to the next
18 slide.

19 MR. LALLY: And if I could have the next
20 slide, Ms. Gilman, please.

21 Q Lieutenant, what time frame are we looking at
22 in this one?

23 A 12:39 a.m. to 5:08 a.m.

24 Q And, again, if you could, using the laser
25 pointer, direct the jury's attention to what, if any,

1 locations of significance you note in this.

2 A So there were a series of calls during this
3 time period. They all used this antenna here, eNB-
4 ID57199, which is south of Meadows Ave.

5 Q If I could direct your attention to the next
6 slide.

7 MR. LALLY: Ms. Gilman, if I could have that
8 one, please.

9 Q And, Lieutenant Tully, what are we looking at
10 as far as time frame in this particular slide?

11 A There was one entry in the call detail records
12 at 5:16.

13 Q And, again using the laser pointer, if you
14 could direct the jury's attention to what, if any,
15 locations you denoted within this particular slide?

16 A I'll start with the antenna that was used,
17 which was 57259 here in downtown Canton, just north of
18 the Waterfall Bar & Grille.

19 Q If I could direct your attention to the next
20 slide, sir?

21 MR. LALLY: Ms. Gilman, if we could?

22 Q Lieutenant, what time frame is that depicted
23 in this slide?

24 A 5:19 a.m.

25 Q Again, if you could, using the laser pointer,

1 direct the jury's attention to where the antenna is
2 that the defendant's phone is connected to at this
3 point and what, if anything, is the closest to it?

4 A Slightly further south than the previous one,
5 it's 57199, directly south of One Meadows Ave.

6 MR. LALLY: Now, I'm going to ask you to turn
7 to the next slide, Ms. Gilman. If I could have
8 that one.

9 Q Lieutenant, what time frame are we looking at
10 in this one?

11 A 5:20 a.m. to 5:37 a.m.

12 Q And, again, if you could, using the laser
13 pointer, direct the jury's attention to where the
14 antenna is and what, if any, of the locations you
15 observed and where it is in reference to?

16 A I previously mentioned this one here at the
17 intersection of Route 93 and 138. It's ID57021. It is
18 north of those locations I had mentioned earlier, 34
19 Fairview and One Meadows Ave.

20 MR. LALLY: And the next slide.

21 Q What time frame are we looking at in this,
22 sir?

23 A It's one entry at 6:00 a.m. from the record.

24 Q And, if you could, again using the laser
25 pointer, direct the jury's attention to the antenna and

1 where it is in relation to the locations of interest in
2 this slide?

3 A It is located just north of Waterfall Bar &
4 Grille in downtown Canton.

5 MR. LALLY: And the next slide.

6 Q What time frame are we looking at in this
7 slide, sir?

8 A 6:03 to 6:57 a.m.

9 Q And, again, using the laser pointer, if you
10 could, direct the jury's attention to which antenna the
11 defendant's cell phone is connected to at this point
12 and where it is in relation to locations of
13 significance or relevance throughout the course of this
14 investigation.

15 A During this time period, the cell phone will
16 bounce back and forth between two antennas. So I did
17 lump them together and place them on one map with this
18 time frame here. So you will see two antennas. One is
19 this one here just west of Route 95, which is 57171.
20 The other antenna is north of 34 Fairview, which is
21 57286.

22 Q Now, sir, as far as the locations that you
23 observed from looking at the CSLI information from the
24 defendant's phone, what, if any, relationship did you
25 note with them in relation to what you had observed on

1 each of the respective videos from the Canton Public
2 Library and the Temple Beth Abraham?

3 A It's consistent. As with anything in our
4 investigation, we want to get corroborating
5 information. So the best corroboration about the
6 location of a handset is to obtain video, receipts,
7 anything else with a timestamp and a location that we
8 can corroborate location of a handset.

9 Q And, with respect to information that you had
10 received as far as the defendant's whereabouts, what,
11 if any, consistency or corroboration was there between
12 witness accounts of the defendant, including the
13 defendant's own statements, as far as where she was and
14 what you retrieved from the CSLI?

15 MR. JACKSON: Objection.

16 THE COURT: Ask it differently, Mr. Lally.

17 MR. LALLY: Sure.

18 BY MR. LALLY:

19 Q Throughout the course of the investigation,
20 were you made aware of path of travel attributed to the
21 defendant both between the hours of -- between the
22 times of 12:00 a.m. and 6:00 a.m.?

23 A Yes.

24 Q And the information that you obtained from the
25 CSLI records, was that consistent with what you knew as

1 far as the location of the defendant?

2 MR. JACKSON: Objection.

3 THE COURT: Ask it differently, Mr. Lally.

4 The objection is sustained.

5 BY MR. LALLY:

6 Q With respect to what you knew as the path of
7 travel of the defendant, the information that you
8 obtained from the CSLI, what, if any, relationship was
9 there between that and the path of travel you knew?

10 MR. JACKSON: Objection.

11 THE COURT: I'll allow it.

12 THE WITNESS: It's consistent.

13 BY MR. LALLY:

14 Q Now, sir, as far as the ranging data, what, if
15 anything, were you able to do with the ranging data in
16 relation to a visual depiction of that?

17 A Similar to the maps we just saw using Google
18 Earth, I made a visual representation of what the
19 records display, specifically where the antenna is.
20 But I did take that additional step to measure the
21 distance out from the antenna that's depicted in the
22 records and draw a semicircle line depicting where that
23 range would lie.

24 MR. LALLY: May I approach the witness, Your

25 Honor?

1 THE COURT: Yes.

2 BY MR. LALLY:

3 Q I show you a document, sir, this one being
4 three pages and ask you to look at that.

5 A (Witness complies.)

6 Q Do you recognize those documents, sir?

7 A Yes.

8 Q And what do you recognize those to be?

9 A A series of maps I created using the ranging
10 or engineering report.

11 MR. LALLY: May I approach, Your Honor?

12 THE COURT: Yes.

13 MR. LALLY: The Commonwealth would seek to
14 introduce and admit as the next exhibit.

15 MR. JACKSON: No objection, Your Honor.

16 THE COURT: Okay.

17 (Whereupon, range reports were entered and marked
18 Exhibit No. 576 in Evidence.)

19 THE COURT REPORTER: Exhibit 576.

20 THE COURT: Thank you.

21 MR. LALLY: And, Your Honor, may I return them
22 to the witness?

23 THE COURT: Yes.

24 MR. LALLY: And, with the Court's permission,
25 if I could display to the jury what has now been

1 marked as 576?

2 THE COURT: Okay.

3 BY MR. LALLY:

4 Q Now, turning your attention to the second page
5 of what's now been marked as Exhibit 576, is that
6 what's up on the screen? What you have before you as
7 Exhibit 576, the second page in, is that what's up on
8 the screen, Lieutenant?

9 A Yes.

10 Q Now, if you could, again, what time frame are
11 we looking at here?

12 A 12:17 a.m.

13 Q And, again, sir, if you could, using the laser
14 pointer, describe to the jury what's depicted in this
15 particular slide.

16 A So two locations again as a frame of
17 reference, 34 Fairview Road in Canton and the Waterfall
18 Bar & Grille are depicted with icons. You'll notice a
19 red lollipop icon here. Next to it, you see a number
20 and the words either "first" or "last." This one,
21 three first and last.

22 If you were to go back to the record or the
23 ranging report, you would go to Line 3, and that's
24 where you would find this record. So it's just an easy
25 way to cross-reference the map with the documents.

1 With these ranging reports, it gives me the
2 range that the handset was from the antenna at the
3 beginning of the communication and at the end of the
4 communication. So it's the first range and the last
5 range. That's why we're using those words.

6 You'll notice a line that goes straight out to
7 the semicircles. That line denotes what's called the
8 azimuth. I failed to kind of describe what an azimuth
9 is.

10 So as antennas are placed in these locations,
11 they are pointed in a direction. Now, they are not
12 typically a 360-degree antenna. Some are but mostly
13 they're not. They're pointed in a direction and have a
14 beam width.

15 Rule of thumb, and as you'll see with the
16 records with Verizon, it says typically it's 120-degree
17 beam width, because they will place three around a
18 circle and get 360 degrees.

19 So with this record here, I know what the
20 azimuth is. I then draw a semicircle in each direct.
21 I'll go beyond that 120 degrees just to give deference
22 to maybe it was on the outer edges of that. So I want
23 to give the tie to maybe it was further away. So
24 that's what's depicting on the map.

25 Q Now, with reference to the semicircle, itself,

1 if I could ask, is the semicircle that is being drawn,
2 what does that exactly denote as to the location of the
3 handset or the cell phone?

4 A The report is telling me that the handset is
5 somewhere on that semicircle. So the phone could be
6 anywhere from here on the semicircle, all the way
7 around to there on the semicircle?

8 Q So again, it's not denoting sort of that the
9 handset or the phone is within the confines of the
10 semicircle but actually on the line that you've drawn?

11 A Correct.

12 MR. LALLY: If I could ask you to flip to the
13 next slide, Ms. Gilman, the next one.

14 Q Now, with reference to what's up on the screen
15 now, Lieutenant, what time frame are we looking at
16 here?

17 A 5:18 a.m.

18 Q And, again, if you could, using the laser
19 pointer before you, draw the jury's attention or direct
20 the jury's attention to what, if anything, of
21 significance you observed in this slide?

22 A So the two icons again appear on the map, the
23 Waterfall Bar & Grille, 34 Fairview Road. Here is that
24 red lollipop, which is the antenna that's used during
25 the communication, the azimuth or the direction in

1 which the antenna is facing is depicted on there, and
2 two semicircles, the first one and the last one. As a
3 frame of reference, I failed to put the Temple Beth
4 Abraham, which would appear right here.

5 Q Now, from what's depicted in these last two
6 exhibits as far as what you were able to plot out from
7 the CSLI and the ranging data, what, if anything, what,
8 if any, significance did that have as far as in
9 reference to the investigation and the handset or the
10 defendant's phone?

11 A It's important to figure out the movements of
12 someone that we are investigating for a crime. So
13 these ranging records really narrow down the scope of
14 they're somewhere around this antenna to it's possible
15 they were somewhere on this line.

16 Again, these records are just depicting where
17 the handset was. But, as we all know, we all travel
18 with our cell phone within arm's reach.

19 Q And, again, in reference to this ranging data
20 in the last two slides here, what, if any, relationship
21 did you find that to have with other information, being
22 videos and witness statements that you obtained during
23 the course of the investigation?

24 A So as we previously showed, Temple Beth
25 Abraham, which would be located here, just south of

1 this intersection here, depicts a large, black SUV
2 traveling north on Washington Street. That SUV is
3 similar to the defendant's. And, with this record
4 here, the phone associated with the defendant was
5 somewhere on this arc at that exact same time.

6 MR. LALLY: May I have a moment, Your Honor?

7 THE COURT: Yes.

8 MR. LALLY: May I approach just to retrieve,
9 Your Honor?

10 THE COURT: Yes.

11 MR. LALLY: Thank you, sir.

12 I have no further questions, Your Honor.

13 THE COURT: Okay.

14 CROSS-EXAMINATION

15 BY MR. JACKSON:

16 Q Good morning, Lieutenant Tully.

17 A Good morning.

18 Q I'm not going to go in any particular order.
19 So forgive me if I bounce around just a little bit.

20 You indicated on direct examination this
21 morning that you didn't seek a search warrant for 34
22 Fairview, the interior of 34 Fairview, correct?

23 A Yes.

24 Q And, to your knowledge, nobody under your
25 supervision sought such a search warrant, either,

1 correct?

2 A Correct.

3 Q You explained that in your mind there was no
4 probable cause to seek a search warrant for the
5 interior of the home; is that right?

6 A Yes.

7 Q But you also admitted that you didn't seek
8 consent for which you don't have to have probable cause
9 if you get consent, correct?

10 A Correct.

11 Q You could ask me right now, hey, Alan, can I
12 look at your cell phone? If I say, sure, you do your
13 thing, right?

14 A I could.

15 Q But for a court to order that I hand over my
16 cell phone, you've got to get a search warrant and sign
17 an affidavit and get a court to agree with it, correct?

18 A Yes.

19 Q You've applied for a myriad of search warrants
20 in your career, I'm guessing?

21 A Yes.

22 Q Very experienced, correct?

23 A Supposedly.

24 Q And I expect that there have been
25 circumstances, Lieutenant Tully, in which you've sought

1 a search warrant and the judge, says, eh, no. I don't
2 think there's enough here, correct?

3 A Yes.

4 Q You don't get in trouble for that, correct?

5 A With whom? I -- no.

6 Q With the court?

7 A No.

8 Q It's not illegal?

9 A It's not illegal.

10 Q You don't get sanctioned for it. You don't
11 get your pay docked because you don't get a search
12 warrant based on a affidavit, correct?

13 A Correct.

14 Q So there is no real sanction in seeking it if
15 you, in good faith, believe there is a reason to seek
16 it, correct?

17 A Outside of the time that it takes to author it
18 and put it together and go to the Court?

19 Q Of course.

20 A Yes. There is no sanction.

21 Q Of course. But, in a homicide investigation,
22 you're not going to fail to do certain investigative
23 tasks because it takes time. You're going to do what
24 is necessary for the investigation, correct?

25 A Yes.

1 Q Of course. You indicated that you did not
2 believe that there was information sufficient that
3 y'all had at the very initial stages of the
4 investigation to seek a search warrant or to ask for
5 consent, correct?

6 A Yes.

7 Q But you did know the following: In the
8 initial moments of the -- the beginning of the
9 investigation, you were aware that John O'Keefe had
10 been invited to a party inside a home, correct?

11 A Yes.

12 Q You knew that that home was located at 34
13 Fairview?

14 A Yes.

15 Q You also knew that John O'Keefe arrived at 34
16 Fairview, correct?

17 A We believe so, yes.

18 Q You also knew at the time that he had been,
19 for want of a better phrase, partying with the
20 individuals who were inside the home, correct, expected
21 to meet at the house?

22 A They were at a bar previous to that, yes.

23 Q You're aware that a drinking glass was found
24 in the yard attendant to or close to, adjacent to,s
25 where Mr. O'Keefe's body was found?

1 A Yes.

2 Q That drinking glass had been broken, correct?

3 A Yes.

4 Q You're aware that drinking glasses are
5 commonly found inside homes, right?

6 A As well as bars.

7 Q As well as bars. But, at that point, you
8 didn't know. It's just a broken glass, correct?

9 A It's a broken glass. Correct.

10 Q You also know that he was found without a coat
11 on?

12 A Yes.

13 Q Are coats normally worn outside or inside?

14 A User's choice.

15 Q Fair enough. Eighteen degrees, you would
16 expect that if someone was outside, they'd have a coat
17 on, correct?

18 A I'm the kind of person who wears shorts
19 throughout the year. I'll often go without a jacket.

20 Q All right. A true Bostonian.

21 A Yes, sir.

22 Q He didn't have any coat, glove, scarfs,
23 nothing like that?

24 A Correct.

25 Q He had no winter gear on whatsoever, correct?

1 A Correct.

2 Q Under ordinary circumstances, and you may be
3 the exception, but under ordinary circumstances, if
4 someone was out in 18-degree weather, you might expect
5 that they would have some winter garb on, correct?

6 MR. LALLY: Objection.

7 THE COURT: Sustained.

8 BY MR. JACKSON:

9 Q You would also -- you certainly would expect
10 that if someone took their coat, their glove, their
11 hat, their winter gear off, they might leave it inside
12 the house, right, rather than outside the house?

13 MR. LALLY: Objection.

14 THE COURT: I'll let you answer that.

15 THE WITNESS: It's probably predicated on
16 where you take it off and your relationship to the
17 location.

18 BY MR. JACKSON:

19 Q Right. A reasonable assumption might be the
20 winter gear might be inside the house?

21 MR. LALLY: Objection.

22 THE COURT: Is that a reasonable assumption,
23 Detective Lieutenant?

24 THE WITNESS: No, Your Honor.

25 BY MR. JACKSON:

1 Q It's not reasonable that he would have his
2 jacket inside the house? You wouldn't just assume
3 that?

4 A You're using the term "the house." Are you
5 talking about 34 Fairview?

6 Q That house?

7 A 34 Fairview?

8 Q Correct.

9 A No, it's not reasonable.

10 Q You didn't think it was reasonable at the
11 time?

12 A I still don't.

13 Q To even ask? He could have even had a jacket
14 off inside the house. And I'm talking about at the
15 time, the initial stages of the investigation.

16 A Who am I asking this question to?

17 Q So I'm asking if you believe it was reasonable
18 if a man is found 30 feet outside the front door of a
19 home and he's got no winter gear on whatsoever that
20 perhaps he came from inside the home, not having donned
21 his winter gear?

22 MR. LALLY: Objection.

23 THE COURT: Can you answer that, Detective
24 Lieutenant?

25 THE WITNESS: It's not reasonable given other

1 information I had.

2 BY MR. JACKSON:

3 Q You also know that he didn't have a shoe on,
4 correct?

5 A Yes.

6 Q Where you might look for the shoe if you
7 didn't find it out by his body initially?

8 A Well, the question is not accurate to the
9 facts that we had at that time.

10 Q Well, the facts that you had at the initial
11 stages -- I'm talking about just after 6:37, 7:30 in
12 the morning when the investigation was beginning.
13 During those times, you didn't have any information
14 about where the other shoe was except he just didn't
15 have a shoe on at the hospital, correct?

16 A We didn't know there was a shoe not accounted
17 for until afternoon time.

18 Q So when you did find out that there was a shoe
19 unaccounted for, one place to look might be outside,
20 correct?

21 A Yes.

22 Q And another place to look might be inside the
23 home, correct?

24 A We looked at the former and we located that.

25 Q You also are aware that a body that's being

1 dragged by the shoulders could easily lose a shoe?

2 MR. LALLY: Objection.

3 THE COURT: Sustained.

4 BY MR. JACKSON:

5 Q Have you ever experienced a homicide in which
6 a body is dragged and you're aware of a shoe being
7 pulled off while the body is being dragged?

8 A Objection.

9 THE COURT: I'll allow that.

10 THE WITNESS: I don't have experience with
11 that.

12 BY MR. JACKSON:

13 Q It's certainly not outside the realm of
14 possibility as a professional investigator, right?

15 A It's possible.

16 Q You're also aware that at least initially it
17 appeared from accounts that John O'Keefe may have been
18 involved in a physical altercation, correct?

19 A It's possible.

20 Q As a matter of fact, that was reported by one
21 of your subordinates, Yuriy Bukhenik, to the medical
22 examiner's office, right?

23 A As a possibility, yes.

24 Q As a possibility. And you're aware that your
25 other subordinate, Trooper Proctor, according to

1 certain information he had gotten from first
2 responders, also believed that a physical altercation
3 was possible, as well?

4 A It was possible, yes.

5 Q Okay. And you also knew that the house would
6 be a normal location to have other individuals who
7 might have been involved in that physical altercation?

8 MR. LALLY: Objection.

9 THE COURT: Can you answer that, Detective
10 Lieutenant?

11 THE WITNESS: An altercation can take place
12 anywhere.

13 BY MR. JACKSON:

14 Q Exactly.

15 A And people can often travel from the location
16 of the altercation miles away to another location.

17 Q Or they could travel 30 feet outside, as well,
18 correct?

19 A Yes.

20 Q Okay. In the early morning hours of -- well,
21 let's say the hours following your Massachusetts State
22 Police initiation or engagement in this investigation,
23 you became aware of Brian Higgins, correct?

24 A Yes.

25 Q That name was bandied about as a potential

1 witness in the investigation, correct?

2 A Yes.

3 Q And you're aware that Brian Higgins indicated
4 that he saw a tall, dark-haired man enter the home
5 after he arrived, correct?

6 A I'm not aware of that.

7 Q And the reason you're not aware of it,
8 Lieutenant Tully, is because nobody bothered to
9 interview Brian Higgins until February 10th, right?

10 MR. LALLY: Objection.

11 THE COURT: So in that form, it will be
12 sustained. Ask it differently, Mr. Jackson.

13 BY MR. JACKSON:

14 Q When was Brian Higgins first interviewed?

15 A February 7th.

16 Q 7th? 10th? Yeah. In February, not January
17 29th, certainly?

18 A Correct.

19 Q Although he was known to be inside the house,
20 correct?

21 A Yes.

22 Q So had you known that, had you had the
23 information, for instance, that Brian Higgins admitted
24 to seeing a tall, dark-haired man walk in the house,
25 that might have changed the complexion of your

1 investigation at that time?

2 MR. LALLY: Objection.

3 THE COURT: Can you answer that, Detective
4 Lieutenant?

5 THE WITNESS: In the off chance that
6 Mr. Higgins presumably had said something like
7 that, I would certainly need more information
8 describing this person.

9 BY MR. JACKSON:

10 Q Right.

11 A I would ask a series of questions to narrow it
12 down to make sure that this person was John O'Keefe.

13 Q Right. Exactly. That would just be a normal
14 part of the investigation. You'd just take Evidence
15 "A" and link it to Evidence "B," to Evidence "C." That
16 would be the normal way to do an investigation,
17 correct?

18 A Normally follow the evidence. Correct.

19 Q Correct. But, in point of fact, nobody did
20 seek a warrant to go inside the house, correct?

21 A Correct.

22 Q Nobody did seek to have a forensic team go
23 inside the house and look?

24 A Correct.

25 Q And nobody asked for consent?

1 A Correct.

2 Q I want to ask you about the sally port video
3 if I could. Did you obtain a copy of any video
4 surveillance footage from Canton Police Department?

5 A Yes.

6 Q Okay. If you can, tell me which footage you
7 obtained and where. There's several videos,
8 Lieutenant, and it can be confusing. So if you could
9 be as detailed as possible, explain what footage you
10 gathered and when you gathered it.

11 A Most recently, and the date escapes me, but
12 it's within the last couple of months, I had contacted
13 Chief Helena Rafferty of the Canton Police Department
14 and asked her to burn another copy or create another
15 copy of the sally port video during a certain time
16 period on January 29th to ensure that video that we had
17 received previously was all of the records responsive
18 to that request.

19 Q And you found out that the video that you
20 received earlier was not, in fact, completely
21 responsive because there was a video left out, right?

22 A I didn't do a one-to-one comparison. I had
23 just made a request.

24 Q Ultimately, you did receive a video of the
25 interior of the sally port, correct?

1 A Yes.

2 Q And can you tell me, did you look at that?

3 Did you review that video?

4 A Quickly. Not the whole thing.

5 Q Okay. Was there anything of note about that
6 interior video -- by the way, let me ask you another
7 question, Lieutenant Tully, just to clarify.

8 There is a very grainy, dark, almost black
9 video of the interior, correct? You've seen that one?

10 A Yes.

11 Q Or excerpts of it?

12 A Yes.

13 Q And that video is missing some pretty
14 significant time frames throughout the video?

15 A I didn't review the whole thing, but I'm aware
16 of that video existing.

17 Q Fair enough. Then there is another video
18 that's pretty clear, right?

19 A Yes.

20 Q Okay. I'm asking you about the clear video.

21 Did you make any note about anything unusual about that
22 video?

23 A No. But, again, I didn't really review it.

24 Q You didn't review it with any detail?

25 A Correct.

1 Q Did you make a note that that video was
2 inverted?

3 A I did not.

4 Q Did you make a note about the timestamp on the
5 video either being correct and properly positioned or
6 inverted?

7 A No.

8 Q Did you give that video to Trooper Proctor?

9 A I believe I gave it to Sergeant Bukhenik.

10 Q Sergeant Bukhenik? And then what did
11 Sergeant Bukhenik do with it?

12 A Reviewed it.

13 Q Okay. Is that somehow uploaded onto the
14 Massachusetts State Police computer system somehow for
15 safekeeping?

16 A No. We'll hold it within the district
17 attorney's office on that server, you know -- the MSP.

18 Q So it is uploaded up on some sort of server?

19 A We will memorialize it somewhere, yes.

20 Q Did Chief Rafferty give it to you on a thumb
21 drive or a disk or how was it physically provided?

22 A I don't know. I didn't receive it. She
23 dropped it off at the office. I remember a thumb
24 drive.

25 Q You remember a thumb drive? All right. And

1 then it's uploaded to the system and the case officer
2 would have access to that system?

3 A Yes.

4 Q And, in this case, that would be
5 Trooper Proctor?

6 A Yes.

7 Q Did you notify Trooper Proctor, when I say
8 "immediately," reasonably quickly after you got notice
9 that the video had been dropped off by Chief Rafferty?

10 A I informed Sergeant Bukhenik.

11 Q Okay. And do you know as you sit here --
12 you may not. As you sit here, do you know if
13 Sergeant Bukhenik reasonably quickly informed
14 Trooper Proctor that that video was just delivered?

15 A I don't know when or where that notification
16 was made.

17 Q As you sit here now, you are aware that
18 Trooper Proctor is aware of that video and had access
19 to it?

20 A Yes.

21 Q Okay. Yesterday, there was some testimony
22 about taillight pieces that were found at the location,
23 correct?

24 A Yes.

25 MR. JACKSON: May I have just a moment, Your

1 Honor?

2 THE COURT: Yes.

3 MR. JACKSON: Your Honor, may I approach the
4 clerk magistrate with a question?

5 THE COURT: Go ahead.

6 (Whereupon, there was a discussion off the record.)

7 MR. JACKSON: With the Court's permission, I'd
8 ask if we could have the evidence bags that were
9 entered into evidence yesterday?

10 THE COURT: Okay. You may.

11 BY MR. JACKSON:

12 Q Before I get to the evidence bags,
13 Lieutenant Tully, maybe a couple more questions about
14 the sally port video.

15 You indicated that you received additional
16 video from Chief Rafferty once she dropped it off. You
17 said within a couple of months?

18 A Additional, that package, yes.

19 Q Okay. What was the original sally port video
20 that you received? In other words, what were you
21 following up on?

22 A What you had previously described as a grainy,
23 blackish video.

24 Q Okay. And so just to be clear and close that
25 loop, when did you receive that video, if you can tell

1 us?

2 A Which one, the grainy one?

3 Q The grainy one.

4 A Earlier in the investigation.

5 Q A year ago? Two years ago?

6 A I don't recall.

7 Q Do you believe it was pretty early on in the
8 investigation?

9 A I don't recall.

10 Q Do you know what the mechanism was that you
11 received that -- if Chief Rafferty is the one that gave
12 over the clear video, how did you get the grainy video?

13 A I don't know.

14 Q Was it you that received it or do you believe
15 that you commissioned Trooper Proctor to go get that
16 video?

17 A That would have been a task for Sergeant
18 Bukhenik or Trooper Proctor or someone else from the
19 unit.

20 Q So the reason you don't know is because you
21 didn't personally do it?

22 A Correct.

23 Q All right. Yesterday you testified that it's
24 obviously your responsibility as not just the chief of
25 the unit but as the evidence officer to maintain and

1 protect the integrity of the physical evidence that's
2 found under your supervision, correct?

3 A Yes.

4 Q You indicated that you took photographs of the
5 items that were recovered on that initial SERT search
6 and you took those photographs in place where they were
7 found, correct?

8 A Yes.

9 Q With the exception of one of the photos you
10 indicated that it had been moved by a shovel and then
11 you instructed the individual to put it back down where
12 it was found and that's the point at which you
13 photographed it, correct?

14 A Yes.

15 Q You took an establishing shot and then a
16 closer shot and then I think even a third close-up
17 shot, correct?

18 A Yes.

19 Q And you indicated pretty clearly yesterday the
20 evidence that you found at the scene was a red plastic
21 taillight piece that was recovered first. Then three
22 feet to the south of that, the shoe was recovered and
23 then one to two feet south of that another red plastic
24 piece and then a clear plastic piece next to that,
25 correct?

1 A You've got the last two inverted. Clear then
2 red.

3 Q Inversion. It's becoming a theme. Sorry
4 about that. So it was the clear piece --

5 THE COURT: I'm going to strike that.

6 BY MR. JACKSON:

7 Q It was a clear piece and then a red piece next
8 to the clear piece?

9 A Yes, sir.

10 Q Three pieces of plastic in total and a shoe?

11 A No. With the clear piece, there were two
12 pieces with it. So clear plastic. Multiple pieces of
13 the clear plastic.

14 Q So yesterday when we saw the photographs that
15 you testified to, there was one piece of clear plastic
16 that was photographed, right?

17 A Two.

18 Q Didn't the photograph have one sort of arc-
19 shaped clear piece of plastic that you described as
20 having, did you say, dimples or stippling?

21 A Yes. I believe I said dimples.

22 Q Okay. What was the second photo?

23 A The next photo that was displayed was the
24 second piece of a clear plastic taillight.

25 Q So in fact, that would be four pieces of

1 plastic?

2 A Yes.

3 Q Okay. But yesterday you testified that you
4 found three pieces of plastic. And, in your report,
5 you reported that you found three pieces of plastic,
6 correct?

7 A I didn't number the pieces of plastic, if I
8 recall my report correctly. I said we found clear
9 plastic. And, as I displayed out of the bag, it was
10 two pieces of clear plastic that we --

11 Q Right. But there was only a photograph of
12 one.

13 A No, there wasn't.

14 Q And your report says three total pieces of
15 plastic, doesn't it?

16 A No.

17 Q Well, let's take a look.

18 THE COURT: Do you have your report with you,
19 Detective Lieutenant?

20 THE WITNESS: Not that one, Your Honor.

21 MR. JACKSON: If I may have just a moment,
22 Your Honor?

23 THE COURT: Sure.

24 MR. JACKSON: Your Honor, is it possible to
25 take our recess so I don't waste the jurors' time

1 and I can use my time wisely?

2 THE COURT: Sure. Sure. All right. Jurors,
3 we will take our morning recess.

4 (Whereupon, the jury is escorted from the courtroom
5 and a recess is taken.)

6 (Court resumes.)

7 (Defendant present. Jury present.)

8 THE COURT: All right. Are you all set,
9 Mr. Jackson?

10 MR. JACKSON: I am, Your Honor. Thank you for
11 the time.

12 THE COURT: Sure. Go right ahead.

13 BY MR. JACKSON:

14 Q Lieutenant Tully, we were talking just before
15 the break about the SERT search on January 29th, 2022.
16 Obviously, it's important to be accurate in terms of
17 the memorialization of things that are found of note
18 during a search, correct?

19 A Yes.

20 Q And the way that you would normally
21 memorialize something like that would be in a police
22 report, correct?

23 A That's one method.

24 Q You might have handwritten notes that would
25 attend a search, correct?

1 A Yes.

2 Q You might videotape part of it or all of it?

3 A I could.

4 Q And then you could photo document it, as well?

5 A Yes.

6 Q But, ultimately, the circumstances surrounding
7 how something was found or what was found at the time
8 is best done in a memorialization in a police report,
9 correct?

10 A That is one method, yes.

11 Q And that is the official record of what was
12 done at the time and who did it, correct?

13 A Yes.

14 Q And you did, in fact, draft a police report as
15 it pertains to the search that was done by the SERT
16 team on February -- I'm sorry -- January 29th, 2022?

17 A Yes.

18 MR. JACKSON: May I approach, Your Honor?

19 THE COURT: Yes.

20 BY MR. JACKSON:

21 Q If you would take a look at the face page of
22 that and tell me if that looks familiar to you.

23 A It does.

24 Q Is that your report that you utilized? Is
25 that the report that you wrote, rather, not utilize.

1 Is that the report that you wrote documenting the
2 search that was conducted that you've testified to in
3 front of this jury?

4 A Yes.

5 Q What's the date of that report?

6 A February 10th, 2021, which was a typo. It
7 should be 2022.

8 Q Okay. So February 10th, 2022 was the date
9 that you memorialized the information about the search,
10 correct?

11 A Yes.

12 Q Obviously, that was much, much closer in time
13 than today, correct?

14 A Yes.

15 Q Or yesterday, correct?

16 A Correct.

17 Q If you turn to Paragraph 3, could you review
18 that paragraph and tell me after you review it if that
19 refreshes your recollection about exactly what you
20 indicated was found by you and the SERT team on January
21 29th, 2022?

22 A My recollection of what was located remains
23 the same. I do see that the report states that it was
24 a piece of clear plastic.

25 Q Okay. So in fact, your report says that at

1 17:45 hours, which is what time --

2 A 5:45 p.m.

3 Q -- the SERT team located, quote, "a piece of
4 red plastic," correct?

5 A Yes.

6 Q And then it goes on to say that it was
7 consistent with brake light material from a motor
8 vehicle, right?

9 A Yes.

10 Q Then if you look down a couple of other
11 sentences, you talk about the shoe that was then
12 recovered, correct?

13 A Yes.

14 Q Then if you look at the second to the last
15 sentence (as read), "A few feet south from the sneaker,
16 a piece of clear plastic consistent with clear lens of
17 a motor vehicle was located," correct?

18 A Yeah. The quote is a second piece of red
19 plastic. Yes.

20 Q Well, actually, the sentence before that. The
21 sentence just above that, starting "with a few feet
22 south."

23 A Yes.

24 Q It reads (as read), "A few feet south from the
25 sneaker, a piece of clear plastic."

1 A That's not what it says. Would you like me to
2 read it?

3 Q Oh, I'm reading it. Sure. Read it.

4 A Okay. The sentence is (as read), "Several
5 feet south of the clear plastic" --

6 Q Lieutenant Tully, the sentence above that,
7 before that.

8 A (As read), "A few feet south of the sneaker, a
9 piece of clear plastic consistent with clear lens of a
10 motor vehicle was located."

11 Q Right. So in your lexicon, a piece means
12 singular, does it not?

13 A Yes.

14 Q If you meant pieces, you would have written
15 "pieces." You're educated, correct?

16 A Allegedly.

17 Q So clearly from this report that was
18 memorialized on February 10th, you indicated that a
19 piece of clear plastic was located, consistent with
20 clear lens from a motor vehicle, right?

21 A That's what it says.

22 Q Okay. Well, it's not just what it says; it's
23 what you wrote?

24 A Correct.

25 Q Then the next sentence, which is the sentence

1 you were about to read, go ahead and read that for me,
2 as well.

3 A (As read), "Several feet south of the clear
4 plastic, a second piece of red plastic was located."

5 Q Okay. Simple math. According to your report
6 written on February 10th, a piece of red plastic was
7 found first. Then a piece of red plastic -- sorry --
8 of clear plastic was found. Then a piece of red
9 plastic was found thereafter, correct, according to
10 that report?

11 A Yes.

12 Q Then you go on in the following paragraph to
13 reiterate, just to clear up any doubt about what was
14 found, and the last sentence reads (as read), "The
15 sneaker and three pieces of plastic were secured as
16 evidence," correct?

17 MR. LALLY: Objection.

18 THE COURT: Overruled. What's the objection?

19 MR. LALLY: Form.

20 THE COURT: I'll allow it.

21 BY MR. JACKSON:

22 Q Is that what it says?

23 A Yes.

24 Q Okay. Then yesterday you were asked to open
25 these two evidence envelopes -- evidence bags, correct?

1 A Could I take a look?

2 Q Of course. Of course. Yes.

3 MR. JACKSON: May I approach, Your Honor?

4 THE COURT: Yes.

5 BY MR. JACKSON:

6 Q Those are the bags that you opened yesterday,
7 correct?

8 A Yes.

9 Q You indicated yesterday in front of the jury
10 -- you didn't indicate. You pulled out two pieces of
11 clear plastic, did you not?

12 A I did.

13 Q That was in Bag -- I want to say that was in
14 Bag 570. Why don't we do this: Can you please open
15 with the Court's permission, can you please open Bag
16 570 -- I'm sorry -- Exhibit 570 in that bag and just
17 look inside?

18 THE WITNESS: I didn't bring gloves with me,
19 Your Honor.

20 THE COURT: I think there might be some on the
21 stand there inside that.

22 THE WITNESS: Attorney Jackson, could you just
23 repeat your question again?

24 BY MR. JACKSON:

25 Q Of course. Of course, Lieutenant. Let's

1 start with 570.

2 A Okay.

3 Q I don't remember which one it is. So if you
4 could just open it and look inside and describe for us
5 which items are inside that bag?

6 A So 570, the description is red pieces of hard
7 plastic taillight cover contained inside this bag.

8 Q If you could just look down there and tell me,
9 do you see red plastic pieces?

10 A Yes.

11 Q Yesterday, you pulled out two pieces and
12 indicated that was what was contained in the bag,
13 correct?

14 A Correct.

15 Q Will you take another closer look?

16 A As I take a closer look, there are two pieces
17 and there is a very small fragment that remains in the
18 bag.

19 Q Can you pull that fragment out, as well?

20 A (Witness complies.)

21 Q Can you show that to the jury?

22 A (Witness complies.)

23 Q Okay. You can go ahead and replace that.

24 So in total, Lieutenant Tully, how many pieces
25 of red plastic are in that evidence bag?

1 A As we sit here today, there are three.

2 Q Thank you. You can go ahead and close that
3 and if you could open up the second bag.

4 MR. JACKSON: With the Court's permission, may
5 I approach?

6 THE COURT: Yes.

7 MR. JACKSON: Your Honor, may I?

8 THE COURT: Yes.

9 BY MR. JACKSON:

10 Q If you wouldn't mind, the next bag is Exhibit
11 571; is that right?

12 A Yes.

13 Q Could you please open that and let's go
14 through the same process. Just look inside and tell us
15 what you see.

16 A Inside 571 there are two pieces of clear
17 plastic.

18 Q All right. And you can go ahead and replace
19 those.

20 MR. JACKSON: May I approach?

21 THE COURT: Yes.

22 BY MR. JACKSON:

23 Q Thank you, Lieutenant. Those two bags are
24 supposed to represent what was found by the SERT team
25 on January 29th of 2022, correct?

1 A Yes.

2 Q There's five pieces of plastic, two red --
3 sorry -- three red, two clear, correct?

4 A As we sit here today, yes.

5 Q My question, Lieutenant Tully, is where did
6 the other pieces of plastic come from?

7 A Can you be more specific? Which pieces?

8 Q Where did the extra two pieces of plastic come
9 from in those evidence bags?

10 A Well, it appears to me that small fragment I
11 pulled out may have potentially come from a larger
12 piece.

13 Q Just to clear that up, you believe as you sit
14 here that that smaller piece was broken off from one of
15 the larger pieces?

16 A Again, I'm making a big assumption here at
17 your request.

18 Q Okay.

19 A So yes. That's what it appears to me by
20 looking in the bag.

21 Q And, by the way, Lieutenant, this isn't a
22 trick question. I'm not asking you to assume anything.
23 You were there and you recovered the pieces and you
24 described recovering three items of evidence, correct?

25 A No.

1 Q Didn't you just read in your report -- I'll
2 read it again. The last sentence (as read), "The
3 sneaker and three pieces of plastic were secured as
4 evidence." You wrote that.

5 A That's four.

6 Q Sorry. I said items of evidence. Items of
7 plastic. Let's leave the sneaker out of our discussion
8 for the time being.

9 A Okay.

10 Q You were the one that conducted the search,
11 correct?

12 A The SERT team conducted the search. I was
13 present.

14 Q You memorialized the search?

15 A Yes.

16 Q You were there photographing the things that
17 were covered in the search?

18 A Yes.

19 Q And, ultimately, you were responsible for
20 bagging those items up, correct?

21 A Yes.

22 Q There are five items in that bag or in those
23 two bags, right, just the plastic?

24 A Correct.

25 Q And, yet, your report very clearly says there

1 were three items of plastic evidence recovered at the
2 scene, correct?

3 A It does.

4 Q So my question once again is, where did the
5 extra two items come from, the two pieces of plastic?

6 A As memorialized on the bag, it says (as read)
7 "pieces of clear plastic." So I'll take the hit that
8 my report does not properly memorialize it. But I
9 would argue that the handwritten notes on the bag that
10 are contemporaneous to the collection of the evidence
11 would be more accurate as is my memory of two clear
12 plastic things being collected.

13 Now, as to the third piece, again, I'm making
14 an assumption that it appears that that is a small
15 piece that was separated from the other two pieces.

16 Q You don't know that that small piece was
17 separated from the other two by being broken off, do
18 you?

19 A No, I don't.

20 Q This is just a guess on your part, right?

21 A It's a guess. The bags were out of our
22 custody at the crime lab for a period of time. They
23 had done an analysis. We did an evidence review with
24 you, yourself and other defense counsel on December 1st
25 of last year when we pulled all of the evidence out.

1 It was memorialized by your investigator and it was put
2 back in the bags.

3 Q But you didn't see our investigator snapping
4 pieces off of plastic, right?

5 A He did not.

6 Q I want to shift gears for a second,
7 Lieutenant, and talk a little bit about the cell
8 records that you testified to, specifically the Verizon
9 call records that you testified about.

10 During your training, the 200-plus hours of
11 training that you had, you've learned how to read
12 Verizon records to determine cell towers that are used
13 in your investigation, correct?

14 A Yes.

15 Q You were also taught how to read Verizon call
16 records to determine the sector or the side that a cell
17 tower is pinging, for lack of a better word, called a
18 cell face, correct?

19 A Yes.

20 Q All right. One of the --

21 MR. JACKSON: May I approach?

22 THE COURT: Yes.

23 MR. JACKSON: Thank you.

24 BY MR. JACKSON:

25 Q May I, Lieutenant? One of the documents that

1 you rely on pretty heavily is a -- ultimately, it's a
2 call record that gives you certain information provided
3 by whoever the carrier is, Verizon, AT&T, T Mobile,
4 whoever, right?

5 A Yes.

6 Q Do you recognize the document that's in front
7 of you or the portion of the call record that's in
8 front of you?

9 A It appears to be a portion from the call
10 detail record in reference to it.

11 Q My questions about this are relatively simple.
12 There is a sector number that provides information that
13 describes the directionality, if you will, of the
14 target phone number, which part of the cell tower that
15 target phone number or that target device was facing,
16 correct?

17 A Yes.

18 Q In your maps, did you include any of the cell
19 face data about which portion of the cell tower was
20 pinging vis-a-vis the phone that was being tracked?

21 A No. Can I explain why I made that decision?

22 Q Sure. Please do.

23 A The trouble with depicting and making exhibits
24 when relative to cell phone records is you don't want
25 to make the map too complicated. So as I describe it

1 to the jury, I want to make sure that the record is
2 clear.

3 Now, I don't -- typically, we'll use the
4 sector as part of my maps. I would argue that it gives
5 greater deference to the defendant because the phone
6 could be anywhere within a 360-degree area of the
7 antenna as opposed to a narrower 120-degree area around
8 that antenna.

9 So for the purposes of making a clear
10 depiction, I typically will not use sector unless it's
11 absolutely important to show that a handset was in a
12 specific location.

13 Q And so you did use -- I'm sorry. You did not
14 include the sector information on the maps that you
15 provided both to Mr. Lally, which he showed to the
16 jury, and provided us, correct?

17 A Yes, as relative to the CSLI ones, yes.

18 Q Okay. So in point of fact, according to the
19 map, at least, wherever that little triangle is, that
20 red triangle that you use to denote the cell tower or
21 the antenna, the responsive phone, a device, could be
22 anywhere on a 360-degree azimuth from that antenna,
23 correct?

24 A Yes.

25 Q Okay. I want to ask you about the one map

1 that was related to 5:20 a.m. to 5:37 a.m. Do you
2 remember that?

3 A Not off the top of my head.

4 Q Okay. There were several maps shown. Let me
5 see if I've got a copy.

6 MR. JACKSON: May I approach?

7 THE COURT: Yes.

8 BY MR. JACKSON:

9 Q That is a copy of a page of an exhibit that's
10 already been marked and entered into evidence. Do you
11 recognize that?

12 A Yes.

13 Q And that's a copy of your map that you did
14 dealing with eNB-ID57021, correct?

15 A Yes.

16 Q And the time frame was 5:20 a.m. to 5:37 a.m.;
17 is that right?

18 A Yes.

19 Q All right. And, by the way, do you know what
20 eNB-ID stands for?

21 A No. That's why the legend key is helpful.
22 It's node, is the NB, but I'm unsure on the e.

23 Q Evolved node B identifier, right?

24 A Is that a question? Yeah. That's possible.

25 Q It is my question.

1 A Okay.

2 Q Does that refresh your recollection that's
3 what it means?

4 A I'd have to look at the key again, but that
5 sounds right.

6 Q So if that's what it stands for, an evolved
7 node B identifier, and then a series of numbers after
8 that is simply sort of the proper name for a particular
9 tower?

10 A Correct.

11 Q No two towers have the same eNB-ID, correct?

12 A Correct.

13 Q Okay. With regard to -- and I'm just going to
14 call it ID57021. Do you see what appears, on your map
15 what appears, to be the cell tower that is associated
16 with that I.D. number, 57021?

17 A Yes.

18 Q And there is one address that is denoted on
19 your map, correct? Is that 34 Fairview?

20 A No. There's multiple.

21 Q Okay. What are the other addresses that
22 you've noted on your map?

23 A One Meadows Ave. and Waterfall Bar & Grille.

24 Q Okay.

25 MR. JACKSON: May I approach, Your Honor?

1 THE COURT: Yes.

2 BY MR. JACKSON:

3 Q If I could hand you another map, does that
4 appear to be a Google map?

5 A Yes.

6 Q Does that generally track the map that you
7 created, the darker map that you created, meaning it's
8 the same basic scale?

9 A It is not the same scale.

10 Q How much different is that scale?

11 A The one you've handed me is a zoomed-in
12 version of the map I created.

13 Q Okay. Do you recognize it as being a true and
14 accurate reflection of a Google map that's just zoomed
15 in a little bit on the same basic area?

16 A As you just described, it appears to be a
17 Google map creation.

18 Q Okay. And do you see two addresses that are
19 denoted on that Google map?

20 A Yes.

21 Q What are those two addresses?

22 A 34 Fairview Road and (f) [REDACTED].

23 Q And, as you look at that Google map with both
24 of those, given your experience with both of those
25 addresses, do those appear to be denoted accurately on

1 that Google map?

2 A It does. I would note that you can't see the
3 roads, really, on this map that you handed me.

4 Q Understood. I'm not going to ask you a
5 question about the roads.

6 A It's a white blur.

7 Q Okay. But does it look like that's where 34
8 Fairview is and that's where (f) (f) is?

9 A Yeah.

10 Q Then I'm going to ask you for the third item
11 that's denoted on the map, and that's the cell tower,
12 57021. Do you see that denoted on the map?

13 A Yes.

14 Q Does that appear to be generally accurate in
15 terms of the spacial location of where that cell tower
16 is?

17 A Yes.

18 MR. JACKSON: I move for the admission of that
19 item, Your Honor, that document.

20 MR. LALLY: No objection.

21 THE COURT: Okay.

22 (Whereupon, map was entered and marked Exhibit 577
23 in Evidence.)

24 THE COURT REPORTER: Exhibit 577.

25 THE COURT: Thank you.

1 MR. JACKSON: Thank you.

2 by Mr. Jackson

3 Q Taking a look at that exhibit, would you agree
4 that the Cell Tower 57021 is significantly closer to
5 what's denoted as (f) [REDACTED], the McCabe residence
6 physically as the crow flies than it is to 34 Fairview?

7 A I would not characterize it as significant.

8 Q How would you characterize it?

9 A That it is closer.

10 Q Okay.

11 MR. JACKSON: May I publish, Your Honor?

12 THE COURT: Okay.

13 BY MR. JACKSON:

14 Q Take a look at the right portion, upper right
15 portion of the map that I just highlighted. What does
16 that denote?

17 A The cell tower we previously mentioned. 57021.

18 Q Okay. And then there is a line, just a
19 straight line, from that cell tower down to this
20 location. What is that location?

21 A It's denoted on this exhibit as 34 Fairview
22 Road.

23 Q Okay. And do you see a legend indicating
24 scale, how far that is?

25 A I see numbers and miles.

1 Q Does that appear to be reflective of, given
2 your understanding and your experience with this
3 location or these locations, does that appear to be a
4 relatively accurate delineation of the distance between
5 the cell tower and that location, and that address?

6 A I don't know the distance between the cell
7 tower and the address.

8 Q Would you agree that it's around two miles?

9 A It's roughly two miles.

10 Q Then I'm going to ask you to take a look at
11 the same proximity of the cell tower at the top of the
12 screen and then the address of (f) [REDACTED]. Do you
13 see those two items denoted on the map?

14 A Yes.

15 Q And do you see the approximate distance
16 between those two items?

17 A I see it on the map.

18 A All right. And does it appear to you that the
19 distance from (f) [REDACTED] looks like it's half the
20 distance to 34 Fairview?

21 A I wouldn't characterize it as it appears to be
22 less than half.

23 Q How would you characterize it?

24 A My understanding of that area, I would say
25 it's at least a mile between those two locations as the

1 crow flies.

2 Q Okay. Meaning between cell tower and [REDACTED]
3 (f) [REDACTED]?

4 A Yeah.

5 Q Right. And that indicates approximately a
6 mile, correct?

7 A It does indicate that.

8 Q And the other location indicates approximately
9 2.4 miles, right?

10 A It does, indeed.

11 Q So would you agree that a mile is less than
12 half of 2.4 miles?

13 A I would agree a mile is less than half than
14 2.4.

15 Q Thank you.

16 MR. JACKSON: We can take that down.

17 Q You also noted that there were two cell towers
18 much, much closer to 34 -- there are two cell towers
19 much, much closer to 34 Fairview than the 57021,
20 correct?

21 A Yes.

22 Q And, as a matter of fact, you already noted
23 for the jurors, say at 6:00 a.m. or 6:05 a.m. and
24 thereafter when it's clear that Ms. Read was at 34
25 Fairview and found the body of John O'Keefe that her

1 phone was relaying to those two towers variously,
2 bouncing back and forth, correct?

3 A Yes.

4 Q Those two towers are 57171, correct? I'm
5 sorry. I don't mean to test your memory like that.

6 MR. JACKSON: May I approach?

7 THE COURT: Yes.

8 BY MR. JACKSON:

9 Q I am just going to give you that packet,
10 Lieutenant. Like I said, it's not a memory test. If
11 that helps refresh your recollection of the name of the
12 two towers closest to 34 Fairview?

13 Do you have that in mind?

14 A Yes.

15 Q Okay. So the two towers closest to 34
16 Fairview are 57171, correct?

17 A Yes.

18 Q And 57286; is that right?

19 A Yes.

20 Q And both of those towers picked up Ms. Read's
21 signal at 12:33 a.m. and again after 6:03 a.m.,
22 correct?

23 A You asked me about 12:33. Is it okay if I
24 refer back to the exhibit?

25 Q Of course.

1 A And that is correct. It's 57171.

2 Q And then after 6:00 a.m., it was also picking
3 up, bouncing, I think you said, bouncing back and
4 forth, between 57171 and 57286?

5 A Yes.

6 Q Both of those towers were picking her up?

7 A Yes.

8 Q Importantly, though, between 5:20 and 5:37
9 a.m., neither of those two towers either picked up her
10 phone or any signal from her phone, correct?

11 A Correct.

12 Q Okay. So based on those facts, it's far more
13 likely that Karen Read was actually at Jennifer
14 McCabe's or on her way to Jennifer McCabe's at and
15 around 5:00 a.m. than going to 34 Fairview, correct?

16 MR. LALLY: Objection.

17 THE COURT: Sustained.

18 MR. JACKSON: May I approach just to retrieve?

19 THE COURT: Sure.

20 MR. JACKSON: I just want to make sure I
21 didn't leave the marked item.

22 THE WITNESS: I'm sorry. Here's the marked
23 item.

24 MR. JACKSON: Perfect. I want to make sure
25 that stays there.

1 THE WITNESS: There were two other documents
2 you handed me previously that are not marked.

3 MR. JACKSON: Okay. Thank you, Your Honor.

4 BY MR. JACKSON:

5 Q I just want to touch very briefly on the
6 ranging data, the RTT records. What does RTT stand
7 for?

8 A It depends on who you ask in Verizon. Either
9 range to tower or ground to trip time.

10 Q Have you ever heard realtime tool?

11 A I have.

12 Q Okay. So RTT has several acronyms but
13 realtime tool is one of them, correct?

14 A Yes.

15 Q The RTT data is what you earlier described as
16 a ranging data or access distance, correct?

17 A I didn't use the term "access distance." I
18 know that Verizon may. But yeah. I said ranging.

19 Q So just in common vernacular, it's the
20 distance from the tower or from the antenna to where
21 the signal is going, correct?

22 A Yes.

23 Q All right.

24 MR. JACKSON: May I approach one more time?

25 THE COURT: Yes.

1 BY MR. JACKSON:

2 Q Could you please review that and tell me if
3 you recognize what's depicted on that document?

4 A I recognize one of the entries from the RTT
5 report.

6 Q And it's around 5:18 in the morning, correct?

7 A Yes.

8 Q Okay. And you utilized this report or
9 portions of this report, including this entry, to come
10 up with your data, especially as it relates to ranging
11 data, correct?

12 A Yes.

13 Q Do you see the column on that document called
14 "pros duration secs"? Procedure duration secs?

15 A I do.

16 Q What does that mean?

17 A That is the amount of time which this
18 communication occurred.

19 Q Okay. Am I correct in understanding that the
20 length of time for the RTT event is calculated in
21 seconds, correct?

22 A It is.

23 Q All right. Do you see the row in the exhibit
24 that indicates the time 5:18 a.m.?

25 A Yes.

1 Q And do you see a column that's labeled,
2 "Procedure Start Time"?

3 A Yes.

4 Q And right next to it there is a "Procedure End
5 Time," correct?

6 A Yes.

7 Q Are those the start times and the end times
8 that you earlier testified to in front of the jury
9 about the event in question at 5:18 a.m. or
10 thereabouts, the start of the interaction or the
11 communication with the device and the end of the
12 communication with the device?

13 A Yes.

14 Q When you say "communication with the device,"
15 what does that mean? What are you referring to? A
16 phone call? A text, something?

17 A We don't know. As I testified to, the ranging
18 reports will create entries even unbeknownst to the
19 user. So I have no information with this record before
20 me about what the user was or was not doing with the
21 phone.

22 Q But your testimony is that those two arcs
23 that we saw, those respective arcs that we saw, your
24 testimony is that this RTT data, in your view,
25 establishes that she was on the device? Not "she," but

1 the device was on the first arc at the start time and
2 it was on the second arc at the end time?

3 A I'm going off the ranging that they give me.

4 Q Right. And then you created those two arcs.
5 I'm just trying to make sure that I understand what the
6 definition of those two arcs are on your map.

7 A The definition comes from the first distance
8 and the last distance, which is denoted on this exhibit
9 you have in front of you.

10 Q Okay. And the first distance is what?

11 A .82 miles.

12 Q Okay. And the second distance is? From
13 memory, I think it's .97?

14 A Correct.

15 Q All right. That's a difference of what? We
16 can do the math.

17 A 1.5 miles.

18 Q .15 miles, correct?

19 A Excuse me. Yes.

20 Q Okay. And do you see the procedural duration
21 column indicated on that document?

22 A I do.

23 Q And the procedure duration column indicates
24 zero, doesn't it?

25 A Yes.

1 Q However, if we look very closely at the start
2 time and the end time, they are not actually the same
3 times, are they?

4 A Correct.

5 Q There's a difference in those two times. Can
6 you tell the jury what that difference is?

7 A It is four-thousandths of a second.

8 Q .004 seconds, correct?

9 A Yes.

10 Q And you testified that you believed that the
11 start and end distances for the RTT event in question
12 indicate two different locations for that device? In
13 other words, the start time, it was on the first arc.
14 The end time, it was on the second arc. You don't know
15 where on the arc but somewhere on those two arcs.

16 A Using the ranging data, I created a map.

17 Q I understand.

18 A That's what I did.

19 Q And so the device would move from the first
20 arc to the second arc, correct?

21 A Yes.

22 Q Right. You're familiar with, obviously, the
23 formula to determine speed using distance and time,
24 correct?

25 A Yes.

1 Q Can you calculate for us the speed that the
2 device would have traveled to go from the first arc to
3 the second arc over a distance of .15 miles in four-
4 thousandths of a second?

5 A Not off the top of my head.

6 Q Okay. Let me see if I can help. So distance
7 -- I'm sorry. Speed is calculated as distance divided
8 by time, right?

9 A Yes.

10 Q If you divide .15 miles by four-thousandths of
11 a second, you come up with 37.5 miles per second; would
12 you agree?

13 MR. LALLY: Objection.

14 THE COURT: Sustained.

15 BY MR. JACKSON:

16 Q Can you do the calculation in your head?

17 A No, sir.

18 Q Do you need a calculator?

19 A I would.

20 MR. JACKSON: Your Honor, if --

21 THE COURT: I'd like to see counsel at
22 sidebar, please.

23 MR. JACKSON: Sure.

24 (Whereupon, there was a sidebar conference as
25 follows:)

1 THE COURT: So what was your objection,
2 Mr. Lally?

3 MR. LALLY: As far as asking the witness to do
4 a calculation, he can ask the witness as far as
5 whether -- what he did. Asking him to do some
6 demonstration or performance is beyond that.

7 MR. JACKSON: The witness was called as an
8 expert. He was qualified as an expert and he was
9 deemed an expert during direct examination. He's
10 indicated that the device -- I just set the
11 foundation. He indicated the device moved from one
12 point to a second over a certain distance over a
13 certain time. I don't need him to do a
14 calculation. If you give me leave, I can do the
15 -- I've already done the calculation, obviously.
16 You know I don't ask a question I don't know the
17 answer to.

18 THE COURT: Right.

19 MR. JACKSON: I don't want to have to put him
20 through doing the math. But, if he is the expert,
21 he should have to do it. If he needs a calculator,
22 I'll give him my cell phone. He can do the math.
23 It's easy.

24 THE COURT: Which do you prefer? It will come
25 in. I don't like demonstrations without any notice

1 of it. There is an objection to it. It's
2 argumentative. But, if you're testing his ability
3 here or you're challenging him as an expert on
4 something, I'll let him ask the numbers.

5 MR. JACKSON: I expect he might say "I don't
6 know."

7 THE COURT: I'll let him use his own cell
8 phone and do whatever he wants to.

9 MR. JACKSON: Sure.

10 (Whereupon, the sidebar conference concluded.)

11 MR. JACKSON:

12 BY MR. JACKSON:

13 Q Lieutenant Tully, do you happen to have your
14 cell phone with you?

15 A No.

16 THE COURT: I thought you were going to ask
17 the other question first.

18 MR. JACKSON: Oh, sure. I can. I can.

19 BY MR. JACKSON:

20 Q Let me ask you -- so you don't have to sit
21 there with a cell phone in front of you, let me ask you
22 if you would agree with this, that .15 divided by .004
23 is 37.5?

24 A I'd have to write it out. I'm not sure. I'm
25 sorry.

1 Q If you had a calculator in front of you, could
2 you do it?

3 A I could.

4 Q You don't have your cell phone with you?

5 A I do not.

6 MR. JACKSON: With the Court's permission,
7 I've got mine here or my co-counsel has one.

8 THE COURT: How about can you use Madam Court
9 Reporter's cell phone? She is closest. Can you do
10 that?

11 MR. JACKSON: Sure.

12 THE WITNESS: Yes, Your Honor.

13 THE COURT: Thank you, Madam Court Reporter.

14 MR. JACKSON: Thank you, Your Honor.

15 BY MR. JACKSON:

16 Q If you could divide .15 by .004? Let me know
17 what you come up with.

18 A 37.5.

19 Q So that would be -- given the fact that the
20 distance as calculated, as indicated on that record the
21 distance is .15 miles over the course of .004 seconds,
22 right?

23 A No. I would push back as to when the distance
24 was being created. That's the first distance and last
25 distance.

1 Q Correct. What you indicated was the cell
2 phone or the device was on the first arc during the
3 first time, the start time, and on the second arc at
4 the end time. All I'm asking is some basic math.

5 So you would agree that if the calculation we
6 just did or you just did is .15 miles divided by four
7 thousandths of a second, that is 37.5 miles per second,
8 to stay consistent, miles per second, correct?

9 A Well, I don't agree with the premise of the
10 question. So the --

11 Q Well, you don't have to agree with the premise
12 of the question. I'm asking you about the math.

13 A Oh, the math is correct. Yes.

14 Q The math is correct. It's miles per second,
15 correct?

16 A Yes.

17 Q Based on that calculation.

18 In order to get to miles per minute, you
19 multiply it by 60, correct?

20 A Yes.

21 Q Can you do that for me, please?

22 A Madam Clerk? The question again, sir? I'm
23 sorry.

24 Q Yes. Multiplying 37.5 times 60 would give us
25 miles per minute. What is that number?

1 A Two thousand two hundred fifty.

2 Q And, if we wanted to go to miles per hour,
3 which we're more familiar with, you'd multiply it by 60
4 again, wouldn't you? And what's that number?

5 A One thousand thirty-five thousand -- excuse
6 me. A hundred and thirty-five thousand.

7 Q A hundred and thirty-five thousand miles per
8 hour, correct?

9 A Yes.

10 Q So you would agree if the premise is moving
11 from the arc, the first arc, moving .15 miles to the
12 second arc over the courses of .004 seconds, the device
13 would have to be traveling 135,000 miles per hour,
14 correct?

15 A In your question, you said 1.5 miles travel.
16 It's .15 miles. You corrected me. I'm going to throw
17 it back at you, sir.

18 Q Sorry. Fair enough. Fair enough. Touche.

19 A All right.

20 Q .15 miles over the course of .004 seconds, the
21 device would have to be traveling 135,000 miles per
22 hour. That's basic math, correct?

23 A Well, I agree with that. I would push back
24 that's that's probably not what the record is
25 indicating.

1 Q You would agree that that is physically
2 impossible, correct?

3 A For a cell phone, yes.

4 Q Right. And you would also agree that since
5 that's impossible, you're not suggesting to this jury
6 that the device moved from Arc 1 to Arc 2 in four-
7 thousandths of a second? That can't be what you're
8 suggesting?

9 A I'm not suggesting that.

10 Q Okay. In fact, what actually makes more sense
11 is that the signal was moving to and from the device at
12 light speed: 186,000 miles per second?

13 A It does. Radio --

14 Q Because you know radio waves move at what?

15 A The speed of light.

16 Q The speed of light: 186,000 miles per second,
17 right?

18 A Yes.

19 Q Okay. If, as you indicated on direct
20 examination, if that return signal, the bounce, is in
21 any way refracted, meaning it takes a deviation and
22 it's not straight because something like, I don't know,
23 weather, precipitation or snow, then it would take
24 longer to get back to the antenna, correct?

25 A That's fair.

1 Q And that could be what's reflected in that map
2 and the distance of the two arcs; isn't that correct?

3 A That's not my experience with these records.

4 Q But you agree that, in fact, the device, as
5 you indicated earlier, moved from Arc 1 to Arc 2 from
6 the start time to the end time, that that's impossible?

7 A No. I'm saying that the records reflect that
8 the first time the distance was created, marked and the
9 second time the distance was marked. That's what's
10 represented on the map.

11 Q Right. But you said that those are reflective
12 of the start time and the end time, which is four-
13 thousands of a second apart?

14 A No. I don't know when these distances were
15 created. It doesn't say start of procedure distance.
16 It says first distance, last distance.

17 Q Actually, it says --

18 MR. JACKSON: May I approach?

19 THE COURT: Yes.

20 BY MR. JACKSON:

21 Q Procedure start time, 5:18:19.154, right?

22 A Yes.

23 Q Procedure end time, 5:18:19.158, right?

24 A Yes.

25 Q That's the distance.

1 MR. JACKSON: May I approach, Your Honor, one
2 more time?

3 THE COURT: Yes.

4 BY MR. JACKSON:

5 Q That's the difference. That's the four-
6 thousandths of a second, correct?

7 A Yes.

8 Q And, on direct examination, you said the start
9 time and the end time are how you calculate the two
10 different arcs, correct?

11 A No. No.

12 Q Are you changing your testimony?

13 A No. The map says "first" and "last." As
14 reflected in the record, the first distance and last
15 distance. So one could hold the map in this record
16 next to each other and figure out how I determined
17 those locations depicted on the map. It doesn't say
18 start and end time. It says "first" and "last."

19 Q Right. But you said that it was the beginning
20 of the communication and the end of the communication,
21 which are both reflected on that document, Lieutenant.

22 A Yes.

23 Q The start time and the end time. I understand
24 what you are saying about the distance. It's .15.
25 Nobody is arguing about that. You're saying -- you

1 said on direct examination that the distance was a
2 difference between what time the first arc occurred and
3 what time the second arc occurred. And there was a
4 distance between it. And your testimony was the device
5 moved from the first arc to the second arc. You just
6 said it, right?

7 A I'm saying the device moved from the first arc
8 to the second arc, yes.

9 Q And it would be impossible to do that in four-
10 thousandths of a second, correct?

11 A A cell phone, yes.

12 Q You did -- one last issue and I'm going to
13 deviate from the cell tower stuff.

14 You got information during the course of your
15 investigation that eyewitnesses or an eyewitness placed
16 a Ford Edge in front of 34 Fairview in the early
17 morning hours of January 29th, 2022, correct?

18 A I'm familiar with that.

19 Q As the supervising investigator -- by the way,
20 you were familiar with the fact that the witness, the
21 eyewitness, placed that Ford Edge -- I'm sorry. Let's
22 see if I can start that over. The eyewitness indicated
23 that the Ford Edge was placed there sometime between
24 2:30 in the morning and 3:30 in the morning, correct?

25 A I'm familiar with that.

1 Q All right. As the supervising investigator,
2 did you do anything to investigate the circumstances of
3 that Ford Edge being placed in front of 34 Fairview
4 sometime between 2:30 and 3:30 in the morning?

5 A Yes.

6 Q What did you do?

7 A Well, we determined the veracity of that
8 statement. We wanted to make sure that the person who
9 gave it is consistent and accurate and had a good
10 vantage point of it. I have concerns about --

11 Q Were you satisfied with that?

12 A No.

13 Q Why not?

14 A Well, the person has given statements multiple
15 times and it appears to have changed over those times.
16 It also appears that the person observed these people
17 from a distance. And also the identification of a Ford
18 Edge seemed highly suggestive the way that I had read
19 the account of it. If I had done that as a police
20 officer, this Court would throw out that
21 identification.

22 Q So did you find out anybody in the Albert
23 family, for instance, owned a Ford Edge?

24 A I don't recall off the top of my head if
25 somebody --

1 Q Did you look at automobile registrations?

2 A I did not.

3 Q Did you task anybody else to look at
4 automobile registration records?

5 A I believe Trooper Proctor and Sergeant
6 Bukhenik had investigated that.

7 Q And do you have any idea with that
8 investigation revealed?

9 A I don't.

10 Q Did the Alberts own a Ford Edge?

11 A I don't know as I sit here.

12 Q They did own a Ford Edge, didn't they?

13 MR. LALLY: Objection.

14 THE COURT: The objection is sustained.

15 BY MR. JACKSON:

16 Q But nothing was done further that you're aware
17 of to investigate the circumstances of that Ford Edge
18 being seen and placed in front of 34 Fairview right
19 where the body was found between 2:30 and 3:30 in the
20 morning, right?

21 A An investigation into the reliability of that
22 witness.

23 Q So you just decided -- and that investigation
24 is, nah, I didn't believe them, right?

25 A No.

1 MR. JACKSON: May I have a moment, Your Honor?

2 THE COURT: Yes.

3 MR. JACKSON: That's all I have, Your Honor.

4 THE COURT: Okay. Mr. Lally, anything?

5 MR. LALLY: Just briefly.

6 REDIRECT EXAMINATION

7 BY MR. LALLY:

8 Q So as far as that last line of questioning, as
9 far as the witness and the Ford Edge, you mentioned
10 that there were several different stories, correct?

11 A Yes.

12 Q Or several different versions of the
13 statement?

14 A Yes.

15 Q And what were those different versions?

16 A The first was that this person saw a Ford Edge
17 in front of 34 Fairview. The next one that I can
18 recall is that the person stated that they were not on
19 Fairview but on Cedarcrest, some distance away, looking
20 at this vehicle in a blizzard. The person also self-
21 reported that he was color blind and he was operating a
22 larger motor vehicle.

23 The third story was a concern about the time.
24 The third story was as he arrived, Canton Police had
25 the street blocked off at about 4:00 a.m., and he

1 places this Ford Edge outside the residence at a time
2 before that.

3 So we know through our investigation that the
4 Canton Police didn't arrive until shortly after 6:00
5 a.m. So the witness's times are off, as well.

6 Q As far as what you termed as a highly
7 suggestive I.D. with the Ford Edge, can you explain
8 what you mean by that?

9 A As I read the report, the investigator had
10 asked a person first a question. They stated that
11 there was a vehicle in front of 34 Fairview Road. The
12 witness was then brought outside, and the investigator
13 allegedly pointed to a motor vehicle that was in a
14 parking lot and said, is that it? And the witness
15 said, yes, that's it.

16 And so it's suggestive in the fact that it
17 would be a single photo identification which, you know,
18 as a police officer, I would not give somebody one
19 thing and be suggestive, is this it, because as the
20 courts have ruled, that's highly suggestive and the
21 person is more likely to adopt that description of
22 whatever they're describing as opposed to use other
23 methods.

24 Q Now, when you were being asked on cross-
25 examination about certain distances from the house at

1 34 Fairview to the area where you have recovered items,
2 repeatedly you have been asked about a distance of 30
3 feet, correct?

4 A I did.

5 Q From the items that were recovered and the
6 area that was described to as to where Mr. O'Keefe's
7 body was located shortly after 6:00 a.m., was that 30
8 feet from the house?

9 A No. Where the items were were a little
10 further on the edge of the property. So it would be
11 closer to 40 or 50 feet.

12 Q And, as far as where Mr. O'Keefe was located
13 with reference to the curb, with reference to the
14 street, how close was that?

15 A From the curb, reports was about 10 feet from
16 the curb.

17 Q And so the evidence was a lot closer to the
18 roadway, a lot closer to the roadway, a lot closer to
19 the curb than it was to the house, correct?

20 MR. JACKSON: Objection.

21 THE COURT: Sustained as to form.

22 BY MR. LALLY:

23 Q As far as the -- what, if anything, did you
24 find significant between the location of the evidence
25 in relation -- and Mr. O'Keefe in relation to the

1 roadway versus in relation to the house?

2 A The piece of evidence were physically on the
3 roadway, on the pavement before the curb.

4 Q Just one question as it applies to the sally
5 port video from the Canton Police Department. Are you
6 aware of sort of how those videos were recorded as far
7 as when they stopped and when they started?

8 A Not off the top of my head, no. The ones we
9 have in possession, no.

10 Q And, as far as -- I'm sorry. Let me ask the
11 question probably a little more succinctly.

12 But, with reference to -- are you familiar at
13 all with the camera system at the Canton Police
14 Station?

15 A Vaguely, yes.

16 Q As far as do you know whether it's motion
17 activated?

18 A The Canton IT director stated that it was --

19 MR. JACKSON: Objection.

20 THE COURT: So the objection is sustained.

21 BY MR. LALLY:

22 Q Well, are you aware that the cameras are
23 motion activated?

24 MR. JACKSON: Objection.

25 THE COURT: As to form, it's sustained.

1 BY MR. LALLY:

2 Q What, if anything, are you aware of as to how
3 the cameras record?

4 MR. JACKSON: Objection.

5 THE COURT: I'm going to allow it.

6 MR. JACKSON: May we approach?

7 THE COURT: Okay.

8 (Whereupon, there is a sidebar conference as
9 follows:)

10 MR. JACKSON: This is hearsay.

11 THE COURT: Yes, but it goes to the *Bowden*
12 stuff, right?

13 MR. JACKSON: That doesn't mean that hearsay
14 gets to come in. I was looking at this yesterday
15 because the Court mentioned it yesterday, given the
16 fact that there was a *Bowden* defense, that they get
17 to establish what they did or didn't do in terms of
18 furthering their investigation. I've been very
19 reserved in terms of my objections concerning, you
20 know, why does --

21 THE COURT: I'm going to stop you. If he
22 knows other than by the IT director told him, he
23 can say it, but not if that's the only way he
24 knows.

25 MR. JACKSON: I think he would only know that

1 if someone told him. That's all.

2 THE COURT: Except he did say he looked at
3 them, not completely but he did review them. So if
4 you can say it other than that, it's coming in --

5 MR. JACKSON: Okay.

6 THE COURT: -- for the reasons about *Bowden*.

7 MR. JACKSON: Understood.

8 (Whereupon, the sidebar conference concluded.)

9 BY MR. LALLY:

10 Q Now, Lieutenant, when it came to the sally
11 port video, at some point you did review them to some
12 extent?

13 A Yes.

14 Q And, over the course of your review, what, if
15 anything, did you note in reference to the time? Was
16 it sort of one long consistent or did it jump?

17 A It jumped.

18 Q And, based on that, what, if any, conclusions
19 did you draw as to how that video records?

20 A It appeared to be motion activated. As these
21 jumps occurred, it appeared to be triggered by motion.

22 Q Now, with reference to the items that were
23 recovered on January 29th during the SERT team search
24 that you were present for, in addition to your police
25 report, how, if at all, were they memorialized?

1 A On the exterior of the paper bags that they
2 were contained in.

3 Q And when was that done? Before or after
4 February 10th when your report was written?

5 MR. JACKSON: Objection.

6 THE COURT: Ask it differently, Mr. Lally.

7 BY MR. LALLY:

8 Q When was the memorialization on the evidence
9 bags done in relation to when you wrote your report?

10 MR. JACKSON: Objection.

11 THE COURT: I'll allow it.

12 THE WITNESS: The difference would be the
13 notes on the outside of the bag happened at the
14 time of collection. And then I wrote my report 11
15 days later.

16 BY MR. LALLY:

17 Q So as far as your memory as you sit here and
18 testify today and yesterday as far as the items that
19 you took out of the bag, are those the same items that
20 you recovered or were recovered by the SERT team on
21 January 29th?

22 A Yes.

23 Q Now, the information from the call detail
24 records that Mr. Jackson presented to you, there was
25 essentially two little columns, correct?

1 A Two rows, yes.

2 Q Two rows. Excuse me. And was that sort of
3 the entirety of what you reviewed as far as the call
4 detail records in relation to generating the slides
5 that were depicted to the jury?

6 A No.

7 MR. LALLY: May I approach, Your Honor?

8 THE COURT: Yes.

9 MR. LALLY: May I see the exhibits? I'm
10 sorry. Whatever the last one was that Mr. Jackson
11 entered.

12 May I approach the witness, Your Honor?

13 THE COURT: Yes.

14 BY MR. LALLY:

15 Q I'm showing you now what's been marked as
16 Exhibit 577 with reference to what Mr. Jackson had
17 given you earlier.

18 Lieutenant, from what's depicted on there,
19 what, if any, issue do you have with the depiction on
20 that exhibit?

21 A Like I mentioned, it's difficult to get a good
22 sense of what we are looking at because the roads don't
23 really appear on here. If they do, they are light and
24 faint. The large black line kind of intersects with a
25 lot of them, with the words in them. At the bottom, it

1 looks like it's written map scale next to a scale, but
2 I can't attest to the veracity of that. Those would be
3 a couple of problems I see.

4 Q Now, with reference to the slides that you
5 created with the different time zones, not just the one
6 single time frame, again, the times that you observed
7 or the location of the handset or the cell phone of the
8 defendant's that you observed from the call detail
9 records, were they consistent with other pieces of
10 evidence that you had, whether it be video and/or
11 witness statements?

12 A Yes.

13 Q And that would be consistent with the location
14 of the defendant, correct?

15 A Yes.

16 Q Now, you were asked some questions about speed
17 and distance of travel. And you indicated that you did
18 not agree with the premise of Mr. Jackson's question,
19 correct?

20 A Yes.

21 Q Can you explain to the jury what it was about
22 the premise or what it was that you did not agree with?

23 A So while I agree it would be impossible for
24 the phone to travel at that distance, I disagree with
25 the premise that the procedure that would be captured

1 here and the distances may not be at the same time. So
2 there may be a distance that could have preceded the
3 procedure, and the end distance could have been after
4 the procedure. There are other ways to capture that
5 information.

6 Again, all I'm doing, and I'm at the mercy of
7 the records, is illustrating them. I then take the
8 next step in order to corroborate that information
9 ideally through video and other location-based
10 information.

11 Q Now, in relation to speed, is that something
12 you've done in other cases with call detail records?

13 A Yes.

14 Q And you mentioned that you weren't able to do
15 it here or couldn't do it here. Can you explain why
16 not?

17 A By "speed," do you mean route of travel or --

18 Q Yes.

19 A So if I have a more robust set of records --
20 so again, we are at the mercy of Verizon here. We only
21 get limited numbers from the ranging date. With other
22 cases if the phone is much more chatty with the
23 antenna, there's more lines of communication. I've
24 seen lines of communication as frequent as every couple
25 seconds or less than a couple seconds.

1 As I map those out, I can make more of a
2 determination of maybe the route of travel of the cell
3 phone. So as I put the first arc, I'll then place the
4 second arc on a map and say to myself, how could a
5 handset get from the first arc to the second arc? And
6 I'll have a number of possibilities.

7 I will then lay out the third arc. Okay. How
8 could a phone get from the second arc to the third arc,
9 and repeat that process, narrowing down the different
10 possibilities. And, oftentimes, I'm able to determine
11 the route of travel, send investigators down to that
12 route, and we find corroborating information.

13 Q And, again, why was it that you weren't able
14 to do that with this information that you received from
15 Verizon in this case?

16 A We received a limited number of entries in
17 this record.

18 Q And what, if any, relationship does that have
19 to sort of the area or the geographical location as far
20 as town of Canton is concerned and the number of
21 antennas they have?

22 A Well, as respective to the number of records,
23 it's a larger area that the cell phone could
24 potentially be.

25 Q So in no way in your testimony or in your

1 slides or anything else are you suggesting that the
2 device or the handset or the defendant's cell phone was
3 traveling at that speed, correct?

4 A Correct.

5 Q So could you explain to the jury again exactly
6 what those arcs mean and what you are explaining with
7 reference to those?

8 A Those records have a start distance and an end
9 distance. I take those distances, place them on a map,
10 starting where the antenna is also in that record. It
11 states it is. I draw a distance from that antenna,
12 draw an arc at that distance with the radius being --
13 with the distance that's on the record and have an arc
14 that's in excess of 120 degrees.

15 Q You were also asked some questions about
16 whether causing some sort of interference in relation
17 to the recording with regard to antennas or which
18 antenna a device might connect to. You indicated that
19 was not your experience with these types of records.
20 Can you expound upon that?

21 A The greatest predictor of what antenna a cell
22 phone is going to use is distance because, like I said,
23 the farther the handset is away from an antenna, the
24 more degraded the signal is going to get. So that is
25 the best predictor.

1 But, like I mentioned earlier, there are
2 things that can disrupt a cell phone signal which would
3 cause a handset not to connect to the closest antenna.
4 And that can be physical obstruction, precipitation;
5 elevation; if an antenna goes down for whatever period
6 or for whatever reason, causing it to connect to
7 another antenna that is technically further away.

8 Q And so from your view of the call detail
9 records and from your mapping from those various time
10 frames contained within the slides that were presented
11 to the jury, what, if anything, can you say from that
12 material in reference to the other evidence collected
13 as to the location of the defendant's cell phone during
14 those relevant time periods?

15 A Well, relevant, I'll zero in at 5:18. I would
16 suggest that the defendant, her vehicle and the cell
17 phone were on Washington Street, outside of the Temple
18 Beth Abraham at that time. That is one thing that I
19 would be comfortable suggesting.

20 MR. LALLY: May I have a moment, Your Honor?

21 THE COURT: Yes.

22 MR. LALLY: Thank you, sir. Nothing further,
23 Your Honor.

24 THE COURT: Mr. Jackson?

25 MR. JACKSON: Very briefly.

RECROSS-EXAMINATION

BY MR. JACKSON:

Q Lieutenant Tully, do you still have I think it's 578, Exhibit 578, in front of you?

A I have 577.

Q Here it is.

THE COURT REPORTER: Exhibit 578 is not marked yet.

MR. JACKSON: Oh, it's not? Where is the RTT record? Is that 577?

THE WITNESS: I have RTT records that are not marked in front of me.

MR. JACKSON: May I approach?

THE COURT: Yes.

MR. JACKSON: Move to admit.

THE COURT: Mr. Lally?

MR. LALLY: Objection.

THE COURT: All right. So let's mark it for identification, and then I'll take a look at it. (Whereupon, RTT record sheet was entered and marked Exhibit "KKK" for Identification.)

THE COURT REPORTER: That will be "KKK" for Identification.

THE COURT: Just have the witness identify it.

MR. JACKSON: I understand. I'm sorry. What

1 was the letters?

2 THE COURT REPORTER: Triple "K."

3 MR. JACKSON: Thank you.

4 BY MR. JACKSON:

5 Q You are looking at triple kilo, correct?

6 A Yes, sir.

7 Q All right. When you created the arcs on your
8 map, you also put on the map 5:18 a.m., correct?

9 A Yes.

10 Q Where did you get that number?

11 A From the procedure start and end time.

12 Q So you did use the procedure start time and
13 end time, correct?

14 A To denote the time but not -- yes, to denote
15 the time on the slide. Yes.

16 Q The time of the event, correct?

17 A Yes.

18 Q All right. So the 5:18:019 -- I'm sorry --
19 5:18 and 19 seconds and then, and I don't have it in
20 front of me, but .154, I think; is that right?

21 A Yes.

22 Q That was the time that you used to establish
23 that the device was on the first arc, correct?

24 A No. I didn't use it to establish the arc. I
25 used the distance to establish the arc, and I placed

1 the time on the slide.

2 Q What time, Lieutenant Tully?

3 A 5:18.

4 Q The time that Verizon gave you as the start
5 time, correct?

6 A Yes. They are both 5:18.

7 Q So there's a start time and a start distance
8 from the tower. In other words, the event took place
9 at this distance at this time starting, correct?

10 A No. You're using the wrong words. It says
11 "first distance."

12 Q I'm not using the wrong words.

13 A Yes, sir. You said "start distance." It's
14 "first distance."

15 Q Okay. Fine. Pick the words. First distance.
16 Start time and first distance, correct?

17 A Yes.

18 Q And then --

19 A Those are on the record.

20 Q Right. Then Verizon gives you an end time,
21 correct?

22 A Yes.

23 Q And the last distance, correct?

24 A Yes.

25 Q And you created your arc based on the start

1 time and the first distance versus the end time and
2 last distance, correct?

3 A No. The time --

4 Q And the reason you're saying no is because
5 that would require the device to travel at 135,000
6 miles an hour, correct?

7 MR. LALLY: Objection. If the witness could
8 please answer the question?

9 THE COURT: Let him finish.

10 MR. JACKSON: Okay. Sure.

11 THE COURT: And then the objection to that is
12 sustained. You can ask it differently.

13 BY MR. JACKSON:

14 Q Go ahead.

15 A The times were not part of the depiction of
16 the range. I will suggest to you that it is probably
17 unbelievable that those are actually start and end
18 times. What I am saying is we don't know for certainty
19 that that is the exact time of the first distance and
20 the last distance. I'd have to look back at the
21 records. But I'd also say that we have corroborating
22 evidence to say that that is accurate.

23 Q So you'd have to look back at the records,
24 correct?

25 A Yes.

1 Q That is your record. That's what you looked
2 at, isn't it?

3 A No. The records key.

4 Q And where is the records key?

5 A They were provided by Verizon.

6 Q Where are they, sir?

7 A I don't have them in front of me.

8 MR. JACKSON: Right. That's all.

9 THE COURT: Okay.

10 MR. LALLY: May we approach just briefly?

11 THE COURT: Okay.

12 (Whereupon, there was a sidebar conference as
13 follows:)

14 MR. LALLY: Just very quick, Your Honor.
15 There were the certified weather records that I had
16 put in. I think --

17 THE COURT: Yes. You made your objection to
18 this yesterday. It's coming into evidence.

19 MR. JACKSON: My objection is that is not a
20 record that I believe should come into evidence
21 under Massachusetts law. It's required to be sent
22 directly to the court. They haven't followed the
23 proper procedure.

24 THE COURT: I am going to let this in. So
25 your objection is noted.

1 MR. JACKSON: Okay.

2 (Whereupon, the sidebar conference concluded.)

3 THE COURT: Madam Court Reporter, we'll have
4 these as the next two exhibits.

5 THE COURT REPORTER: That will be Exhibit 578
6 and 579.

7 (Whereupon, weather records were entered and marked
8 Exhibit No. 578 (previously "JJJ") in Evidence.)

9 (Whereupon, there was a sidebar conference as
10 follows:)

11 THE COURT: All right. What's the objection,
12 Mr. Lally?

13 MR. LALLY: My issue is it's portions of the
14 records. If he wants to put it in its entirety of
15 the records, go ahead. But just putting in one row
16 from the call detail records is not an accurate
17 depiction of what it is.

18 THE COURT: What do you say, Mr. Jackson?

19 MR. JACKSON: It's absolutely an accurate
20 depiction of what it is. This is a record from
21 5/18. I'm not worried about what happened at 12:30
22 p.m. or 3:00 o'clock. I'm worried about what
23 happened at 5:18. This is what he based his
24 knowledge.

25 THE COURT: He's already testified to every

1 single thing that's on this, correct?

2 MR. JACKSON: Correct.

3 THE COURT: Okay. This is coming into
4 evidence.

5 (Whereupon, the sidebar conference is paused.)

6 THE COURT: So, Madam Court Reporter that is
7 the next exhibit.

8 THE COURT REPORTER: That will be Exhibit 579.

9 (Whereupon, RTT record sheet (previously "KKK" for
10 Identification) was entered and marked Exhibit No.
11 579 in Evidence.)

12 (Whereupon, the sidebar conference continued.)

13 THE COURT: Is there anything else?

14 MR. LALLY: No.

15 THE COURT: Okay. Did you need that? Is that
16 why you wanted it now or was it just sort of
17 housekeeping?

18 MR. LALLY: No. It was just sort of hanging
19 out there and I didn't want to leave it before the
20 witness got off the stand.

21 THE COURT: Yes. Okay. So we will continue
22 with the next witness.

23 MR. LALLY: Yes, Your Honor.

24 (Whereupon, the sidebar conference concluded.)

25 THE COURT: All right. Lieutenant Tully, you

1 are all set, sir. If I may have that exhibit.

2 Thank you very much.

3 THE WITNESS: Your Honor, I believe that is
4 defense counsel's.

5 THE COURT: All right.

6 (Whereupon, the witness is excused.)

7 THE COURT: Your next witness, Mr. Lally.

8 MR. LALLY: Yes, Your Honor. The Commonwealth
9 calls Dr. Brian Gallerani to the stand.

10 Whereupon,

11 BRIAN GALLERANI

12 having been first duly sworn, was examined and
13 testified under oath as follows:

14 THE COURT: Whenever you are ready, Mr. Lally.

15 MR. LALLY: Thank you, Your Honor.

16 DIRECT EXAMINATION

17 BY MR. LALLY:

18 Q Good afternoon, sir.

19 A Good afternoon.

20 Q Could you please state your name and spell
21 your last name for the jury?

22 A Brian Gallerani, G-A-L-L-E-R-A-N-I.

23 Q What do you do for work, sir?

24 A I'm currently employed as a sergeant for the
25 Needham Police Department.

1 Q And how long in total have you been a member
2 of the Needham Police Department?

3 A I graduated the academy January of 2006.

4 Q And how long have you held the rank of
5 sergeant?

6 A Just under a year.

7 Q Now, prior to you holding the rank of
8 sergeant, what was it that you did within the Needham
9 Police Department?

10 A I was a detective from September of 2014 to
11 June of 2023.

12 Q Now, over the course of your work as a
13 detective and sergeant with the Needham Police
14 Department, what, if any, training have you received in
15 regard to collection of biological samples?

16 A As part of a sexual assault class I took in
17 January of 2015, I was certified in DNA collection by
18 the Mass. State Police.

19 Q Can you explain a little bit to the jury about
20 sort of what that certification process entailed or
21 what it was that you did to become certified?

22 A So I was specifically certified in buccal
23 swabs, which is the process of collecting cells
24 suitable for DNA comparison by swabbing inside of a
25 person's cheek.

1 Q And that certification, is that up to date at
2 this point?

3 A Yes.

4 Q Now, at some point on January 16th, 2024, did
5 you have occasion to collect buccal swabs or samples in
6 relation to this case?

7 A I did.

8 Q And fair to say as far as your work with the
9 Needham Police Department, you had no familiarity or
10 work with the investigation on a Canton Police
11 Department case?

12 A Correct.

13 Q Or in a state police case involving incidents
14 that occurred in the town of Canton?

15 A Correct.

16 Q You didn't know any of the parties involved in
17 the case?

18 A I did not.

19 Q So on January 16th, 2024, where did you go on
20 that day?

21 A I went to the Norfolk District Attorney's
22 Office in Canton.

23 Q And who, if anyone, did you meet with or who,
24 if anyone, did you collect samples from on that day?

25 A I collected samples from Sergeant Bukhenik and

1 Trooper Proctor.

2 Q And can you explain to the jury just briefly
3 as far as your collection as far as what physically did
4 you do?

5 A So I physically swabbed the inside of their
6 mouths with a cotton swab and collected the evidence,
7 sealed it up in a buccal swab kit, photographed and
8 brought it back to the Needham Police Department.

9 Q And, when you brought it back to the police
10 department, what did you do with it then?

11 A I entered it into evidence.

12 Q And did you do that in conformity, both the
13 collection and the securing of the item, did you do
14 that in conformity with your training and certification
15 on buccal swab collection?

16 A I did.

17 Q Now, with reference to those items, at some
18 point were you informed that those items were to be
19 transferred or transported to a Bode Technology lab in
20 Lorton, Virginia?

21 A I was.

22 Q And were there specific instructions as far as
23 shipping was concerned that were provided by the Bode
24 Technology lab?

25 A Yes.

1 Q And the shipping that occurred in this case,
2 was that in conformity with what Bode had provided as
3 far as the policies or protocols for shipping those
4 types of materials?

5 A It was.

6 MR. LALLY: Thank you, sir. I have nothing
7 further.

8 THE COURT: Anything?

9 MR. YANNETTI: We have no questions.

10 THE COURT: You're all set, Sergeant. Thank
11 you very much.

12 THE WITNESS: Thank you. Have a good day.

13 (Whereupon, the witness is excused.)

14 MR. COURT: Your next witness?

15 MR. LALLY: Yes, Your Honor. The Commonwealth
16 would call Mr. Nicholas Bradford to the stand.

17 Whereupon,

18 NICHOLAS BRADFORD

19 having been first duly sworn, was examined and
20 testified under oath as follows:

21 DIRECT EXAMINATION

22 BY MR. LALLY:

23 Q Good afternoon, sir.

24 A Good afternoon.

25 Q Could you please state your name and spell

1 your last name for the jury?

2 A Yes. It's Nicholas Bradford.

3 Q And, sir, that microphone before you is
4 adjustable. You can place it anywhere that's
5 comfortable for yourself. Okay?

6 And what is it that you do for work, sir?

7 A I'm a data analyst for Bode Technology in
8 Lorton, Virginia.

9 THE COURT: Okay. You're definitely going to
10 have to keep your voice up, sir. Okay?

11 THE WITNESS: Sorry about that.

12 THE COURT: Thank you.

13 BY MR. LALLY:

14 Q And, just for the record, Bode is just spelled
15 B-O-D-E; is that correct?

16 A Correct.

17 Q Now, sir, if I could just ask you some
18 questions about your educational background, starting
19 with your undergraduate. Where did you go for your
20 undergraduate and what, if any, degree did you receive
21 from there?

22 A I have a Bachelor of Science in Forensic
23 Biology from Mercyhurst College in Erie, Pennsylvania.

24 Q And then following your graduation with that
25 degree, where did you go from there?

1 A I have a Master of Forensic Science in
2 Forensic Molecular Biology from the George Washington
3 University in Washington, D.C.

4 Q And when about was it that you received that
5 master's?

6 A It was around about 2011.

7 Q And, with relation to your graduate work and
8 your work at Bode, when did your work at Bode begin
9 with relation to your graduate work?

10 A I started at Bode at about 2009.

11 Q So during the course of your graduate school?

12 A Yes.

13 Q And, when you started with the Bode lab, what
14 was the sort of position or what did you start doing
15 when you began there?

16 A I was a DNA technician. We assisted the
17 analysts with their case files and we primarily
18 operated the different robotics and the different
19 processes in the lab.

20 Q And, at some point over the course of your
21 work there, you then became an analyst; is that
22 correct?

23 A Yes.

24 Q And about how much time elapsed or how much
25 time did you spend as a technician prior to becoming an

1 analyst?

2 A I was a technician for about a year, maybe
3 two. And then I was in the data banking section as an
4 analyst. And, since then, I've worked in the high
5 throughput casework group and the customized casework
6 group.

7 Q Now, as far as your work within this
8 particular field, have you had occasion to work at any
9 other sort of labs or facilities?

10 A Yes. For about three years, I worked at the
11 Pennsylvania State Police DNA Lab.

12 Q Now, Bode Technology, as far as that lab is
13 concerned, can you describe for the jury sort of what
14 kind of lab that is, and let me ask you first, about
15 how many analysts work at Bode Technology?

16 A Somewhere in the neighborhood of maybe 100
17 analysts, give or take. We are a small private lab in
18 Lorton, Virginia, and we do DNA work contracted through
19 different police agencies throughout the country.

20 Q Now, in addition to police agencies, are there
21 other types of entities that you would accept or that
22 would send submissions for DNA casework?

23 A Yes. We do some international work with
24 human identification and that sort of thing, as well.

25 Q Now, as far as the lab of Bode Technology, is

1 that lab accredited?

2 A Yes. We are accredited through the National
3 Standards Institute.

4 Q And can you speak a little bit about that sort
5 of accreditation process and what it means to be an
6 accredited lab?

7 A Yes. So that, the National Standards
8 Institute, has a set of criteria for DNA labs doing
9 forensic work, and we are audited against those
10 criteria every year, sometimes internal audits and
11 sometimes external audits.

12 Q And is that accreditation at the lab, is that
13 up to -- is the accreditation, is it current as of now?

14 A Yes.

15 Q Now, with reference to your work as a DNA
16 analyst, can you describe just in general terms for the
17 jury what it is that you do in reference -- what is it
18 that you do in reference to your work as a DNA analyst?

19 A Yes. So we take in evidence that is submitted
20 to us. We process it through the DNA processing. So
21 there are four basic steps to DNA. There's extraction.
22 So that's where we separate out the DNA. And then
23 there is quantification. And that is just basically us
24 determining how much DNA we have to work with.

25 The next step is amplification. So depending

1 on the case and the different processes that we're
2 going to use, we are targeting a number of different
3 locations in the genome, and we are going to make
4 millions of copies of each of those locations. And, in
5 each one of those copies, there is a fluorescent tag
6 that we can then detect in the detection step. And
7 that's the fourth step. And then from there, we have
8 the DNA profile for that sample.

9 Q Now, with reference to the lab as far as
10 training is concerned, you mentioned that you spent at
11 least a year or two as a technician prior to becoming
12 an analyst. What is some of the specialized training
13 in this area that you undergo as an employee at this
14 lab?

15 A Yes. So the training program involves a lot
16 of scientific literature reading. There is a practical
17 aspect to it where we are given known samples that were
18 to treat as if they were casework samples. So we
19 process those as if they were casework. We have
20 written and verbal exams and we have a moot court exam
21 at the end.

22 Q And you successfully completed each of those
23 training portions over your course of work with the
24 lab?

25 A Yes.

1 Q And are you familiar with a term known as
2 "proficiency test"?

3 A Yes.

4 Q And can you explain to the jury what that is
5 and how it relates to your work as a DNA analyst at
6 Bode Technology.

7 A Yes. So part of our accreditation is we have
8 to do proficiency testing twice a year. And that is
9 when an outside company sends us known samples and we
10 process them, again, as if they were casework. And
11 then those results are sent to that outside company,
12 and then we get the results back to see if we are
13 proficient in those technologies or not.

14 Q And, with respect to yourself as far as the
15 proficiency testing that you've undergone, what, if
16 any, issues have you had with proficiency testing that
17 you've undertaken?

18 A I've passed all my proficiency tests.

19 Q Now, what is DNA?

20 A So DNA is essentially the blueprint for a
21 living thing. It's in most of our cells, and it's
22 unique to an individual with the exception of identical
23 twins.

24 Q Now, at some point in January of 2024, did you
25 receive a particular assignment in regard to DNA

1 analysis from -- a number of items that you received
2 from Massachusetts?

3 A Yes.

4 Q And, specifically, can you describe the
5 process as far as like when an item comes into the lab
6 at Bode Technology how it's sort of processed or how --
7 from the time of receipt to the time that the item gets
8 to you, can you explain a little bit about that
9 process?

10 A Yes. So the item is generally sent via UPS or
11 FedEx. It arrives in our secure evidence room. That
12 room has limited access to only certain individuals.
13 And, from that point on when it's received, a chain of
14 custody is started for that shipment. And anytime
15 anyone touches or uses that item, we need to check it
16 out from the secure evidence room and then that's all
17 logged on the chain of custody.

18 Q Now, when something comes in, is it assigned a
19 sample name, a case number or an I.D. number in some
20 way, shape or form?

21 A Yes.

22 Q Is it also identified by sort of corresponding
23 numbers from the external vendor where it came from?

24 A Yes.

25 Q Now, in reference to Bode Case No. CCA2416-

1 0023, did you perform work in relation to that case?

2 A Yes.

3 Q And there was a corresponding agency case
4 number of 22-02184; is that correct?

5 A Yes.

6 Q And that would have been from the outside
7 vendor or at least one of them as far as the
8 Massachusetts State Police Crime Lab, correct?

9 A Correct.

10 Q So there were a number of items that you
11 received. If you could identify them for the jury,
12 what you received and specifically sort of what you
13 looked at?

14 A Yes. So we received an apparent hair. We
15 received an extract from a taillight from a vehicle,
16 and we received two reference samples from two troopers
17 from the Massachusetts State Police.

18 Q And, in addition, was there a sample I.D. as
19 far as a known standard?

20 A Yes. So Bode gives it our own item number.
21 So in this case, the two reference samples were
22 CCA2416-0023 R03 and the same number R04 for the two
23 reference samples.

24 Q Now, if I could just ask you to further
25 expound upon as far as the CCA2416-0023, which is E01,

1 there was an agency sample I.D., is that correct, that
2 was attached to that?

3 A Yes.

4 Q And what was that, sir?

5 A So that was 3-6.1.

6 Q And is there a description that comes from the
7 external vendor as well as to sort of what that item
8 is?

9 A Yes. In this case, the sample was a shaft end
10 of hair from exterior passenger side rear panel.

11 Q And there is a specific Mass. registration
12 plate that's associated with that hair, as well; is
13 that correct?

14 A Yes.

15 Q And that was 3GC684; is that correct?

16 A Correct.

17 Q Now, with reference to the R03 and R04, those
18 were buccal samples; is that correct?

19 A Yes.

20 Q And R03 specifically, as far as the agency
21 description, what if anything was provided as far as
22 that information?

23 A For R03, that was the buccal swab from
24 Yuriy Bukhenik.

25 Q And as far as R04?

1 A That was the buccal swab from Michael Proctor.

2 Q Now, with reference to extract portion, that
3 was EO2; is that correct?

4 A Yes.

5 Q And, if you know, what -- when you say
6 "extract," can you explain to the jury sort of what you
7 understand that term to mean or what is an extract as
8 far as what you looked at?

9 A Yes. So when I described the four-step
10 process earlier, so the extraction was already done
11 prior to us receiving the item. So essentially the
12 extract comes to us in a tube, and it's a liquid. And
13 provided with that would be the negative control that
14 was associated with it.

15 So from that point, we have the quantification
16 information from the lab that did the extraction. So
17 then we would amplify and then detect the profile from
18 there.

19 Q And, just to be clear, as far as the EO2 that
20 you were talking about as far as the extract that you
21 had received, what was the agency description on that
22 extract?

23 A So that was the sample from passenger side
24 taillight along with the same registration number. And
25 that was labeled as an extract.

1 Q Now, in addition to that, there was a known
2 blood standard which you indicated was Item or Agency
3 Sample I.D. 8-1.1.1?

4 A Yes.

5 Q And what was the agency description on the
6 known blood standard?

7 A That would be from -- excuse me. That was the
8 sample from John O'Keefe, the profile, I should say.

9 Q And so when you say "the profile," what do you
10 mean by that?

11 A Yes. So the profile was generated by the
12 Massachusetts State Police lab and then that profile
13 was given to us to do a comparison.

14 Q Now, as far as the profile that was provided
15 as far as your observations of that, what, if any,
16 issues did you observe in your observations of the
17 profile that was provided by the state police crime lab
18 in Massachusetts?

19 A It looked like a standard single-source
20 profile.

21 Q Now, starting with as far as -- there was an
22 STR processing that was conducted, correct?

23 A Yes.

24 Q What does STR stand for?

25 A It stands for short tandem repeats. And

1 essentially what we are doing with that is it's the DNA
2 process that we use in forensic testing where the areas
3 that we are amplifying are short repeats of a genetic
4 sequence that repeat multiple times and we're just
5 measuring the number of times that sequence repeats.
6 And those numbers, together, are the profile.

7 Q Now, as far as the profile from the extract
8 that you received as far as E02 from the passenger side
9 taillight of the vehicle, what, if anything, were you
10 able to determine based on your analysis and STR
11 processing of that?

12 A Yes. So we determined that it was consistent
13 with a mixture of three individuals, including at least
14 one male contributor.

15 Q And so if you could just walk the jury through
16 as far as the process as far as the testing. What is
17 it that you're actually doing in the lab? What are you
18 looking at and how are you making a comparison?

19 A So once we have the DNA profile, like I said,
20 we are measuring the number of times the sequence
21 repeats at a given location. So we have a series of
22 those. And then we compare that to the reference
23 profile that we were provided or that we generated for
24 the two reference samples that we actually processed.
25 And then we determine if it's possible that the

1 individual whose reference profile it is could be a
2 possible contributor to that mixture profile that we
3 got from the evidence. And then we need to do a
4 statistical calculation to determine the strength of
5 that possibility of an inclusion.

6 Q Let me ask you a little bit about as far as
7 that statical calculation. How is that done or where
8 did that come from?

9 A So in this case, we did what's called a
10 likelihood ratio. Essentially, what we are doing is
11 comparing two explanations for the day-to-day profiles
12 that we observed.

13 So if we have say, you know, Person "A." One
14 explanation would be that the DNA profile is a mixture
15 of Person "A" and two unknown individuals. And then
16 the other explanation would be that it's simply three
17 unknown individuals and it's not Person "A." So then
18 we compare those two explanations of the profile and
19 determine which one is more likely.

20 Q Now, as far as the sort of reference samples
21 that you had, you had the DNA profile of John O'Keefe,
22 correct?

23 A Correct.

24 Q And I'm sorry. Before starting that, you had
25 the extract with the DNA profile with multiple

1 contributors from the taillight, correct?

2 A Yes.

3 Q So then you have the known blood standards or
4 the DNA profile from John O'Keefe, correct?

5 A Yes.

6 Q And then you have the buccal samples from
7 Yuriy Bukhenik and Michael Proctor, correct?

8 A Yes.

9 Q And so with reference to those specifically as
10 far as the reference samples, is that what you're
11 generating the DNA profiles from?

12 A So we are comparing those references to the
13 mixture that we obtained from the taillight.

14 Q Okay. And so in your comparison, let me start
15 with the known one as far as John O'Keefe. What, if
16 anything, did you find from your comparison of the
17 John O'Keefe DNA profile to the DNA profile from the
18 taillight?

19 A Yes. So in this case when comparing the John
20 O'Keefe profile, assuming a mixture of three
21 individuals, it is at least 749 nonillion times more
22 likely to be observed if it originated from John
23 O'Keefe and two unknown, unrelated individuals than if
24 from three unknown, unrelated individuals. And we
25 provide a sort of verbal qualifier to that because most

1 people don't have a lot of experience with nonillion.
2 So in this case, that would be a very strong support
3 for inclusion.

4 Q If you know, nonillion, how many zeros are we
5 talking about?

6 A So that would be the number with 30 zeros.

7 Q And so that would be a strong support for
8 inclusion, correct?

9 A Yes.

10 Q Now, with regard to your comparison, with
11 regard to your work as a DNA analyst, is there any kind
12 of software that you use in the course of your analysis
13 with regard to a STR mix?

14 A Yes. When there is a mixture profile, we
15 often use what we call STRmix. And it's essentially a
16 computer program that we input the DNA profile and it
17 allows us to use a series of mathematical equations to
18 help us interpret that mixture.

19 Q And was that done in this case, as well?

20 A Yes. And then we use that same program to run
21 the statistics.

22 Q Now, with regard to the sample, the buccal
23 sample contributed from Yuriy Bukhenik, did you run
24 that for a comparison, as well?

25 A Yes.

1 Q And what, if anything, were your findings in
2 relation to your analysis of that?

3 A So in that case, assuming a mixture of three
4 individuals, the DNA profile obtained is at least 46
5 million times more likely to be observed if it
6 originated from three unknown, unrelated individuals
7 than if from Yuriy Bukhenik and two unknown, unrelated
8 individuals.

9 So that sounds confusing, given what I just
10 said. So the verbal qualifier for that would be very
11 strong support for exclusion.

12 Q I'm sorry. Very strong support for an
13 exclusion; is that correct?

14 A Correct.

15 Q And then similarly, as you were testifying,
16 what, if anything, did you find from your analysis and
17 comparison of the buccal sample or DNA profile from
18 Michael Proctor?

19 A Yes. So in that case, again assuming a
20 mixture of three individuals, it is at least 76,000
21 times more likely to be observed from three unknown,
22 unrelated individuals than if from Michael Proctor and
23 two unknown, unrelated individuals. So that would be
24 strong support for exclusion.

25 Q So correct me if I'm wrong, but your findings

1 with regard to the three samples is strong inclusion or
2 strong support for inclusion of John O'Keefe; is that
3 correct?

4 A It would be very strong support for inclusion.

5 Q And strong support of exclusion for both
6 Yuriy Bukhenik and Michael Proctor, correct?

7 A Correct.

8 Q Now, sir, in addition to that, you had
9 mentioned that there was an EO1 sample that was the
10 shaft end of a hair from the exterior passenger side
11 rear panel of that same vehicle with the same
12 Massachusetts license plate, correct?

13 A Correct.

14 Q Now, with regard to DNA as it pertains to hair
15 samples, can you describe for the jury sort of that
16 process and -- so what is it that you're -- when you
17 receive a hair sample as far as an extraction is
18 concerned, how does that process work or what are you
19 getting that extraction from?

20 A Yes. So when we have a hair, generally we'll
21 take a look at it and a forensic biologist will give
22 their opinion on if it's likely that we'll obtain a
23 profile from that hair because hairs can be a little
24 tricky.

25 So in this case, the forensic biologist

1 determined that the hair would likely not provide a
2 great profile from STR testing. But we went ahead with
3 it anyway just because sometimes it does work. But, in
4 this case, we extracted, and that involves dissolving
5 the hair, and forming an extract like the other
6 samples.

7 And then we quantified the hair in this case.
8 And the quantification that I used targets what is
9 called autosomal DNA or nuclear DNA. And, in that
10 case, the results were below the limit of detection.
11 So we did not process that sample for STRs because we
12 would not have obtained a useful DNA profile from it.

13 Q Now, sir, if I could just take you back a
14 little bit in that. Earlier in your statement right
15 there, you just indicated that hair samples or DNA from
16 hair can be a little tricky. Can you expound upon that
17 and explain to the jury sort of what you mean by that?

18 A Yes. A lot of times hairs, unless they have a
19 root attached, they are not a great sample for nuclear
20 STR testing. They can be but it's sometimes hit or miss.

21 Q And, as far as what's actually being tested as
22 far as STR when it comes to a hair, it's not the actual
23 hair; is that correct?

24 A I'm not sure I follow. Can you --

25 Q Let me ask you this: Are you familiar with

1 the term follicular tissue?

2 A Yes.

3 Q And can you explain to the jury what that
4 means in relation to a hair sample in DNA testing?

5 A Yes. So when there's a follicle attached,
6 that is generally where you will get the nuclear DNA
7 from, not the hair, itself.

8 Q And follicle would necessarily be attached to
9 the root end and not to the shaft end, correct?

10 A Correct.

11 Q Now, as far as autosomal DNA, can you explain
12 what is autosomal DNA and sort of where does that come
13 from within DNA testing?

14 A Yes. So you can think about that more as
15 nuclear DNA. So that would be DNA that's in the
16 nucleus of the cell. So that's what most people think
17 of when they think of DNA. But there are other forms
18 of DNA. So for example, mitochondrial DNA. That
19 exists outside the nucleus.

20 Q And, as far as the testing that you performed
21 in regard to this hair sample, that was STR testing; is
22 that correct?

23 A Yes.

24 Q What were the findings, again, with relation
25 to the STR testing?

1 A Yes. So like I said, we quantified the hair
2 and it was below the limit of detection. So we did not
3 process that hair for STR.

4 Q Now, as far as that terminology "below the
5 limit of detection," can you explain a little bit to
6 the jury sort of what that means as it applies to the
7 testing that you conducted?

8 A Yes. So the instrumentation has a limit of
9 detection. So there could be potentially small amounts
10 of DNA there but it's below the limit that we are
11 confident to say that there is DNA present. So we
12 would normally not process those samples forward.

13 Q Now, that hair sample as far as the one that
14 you tested, you mentioned that it was not initially
15 advisable, I guess, for STR testing and you just went
16 ahead and did it anyway because sometimes it works; is
17 that correct?

18 A Yes. It's usually worth a try.

19 Q And then beyond that, that hair sample within
20 your lab, as far as Bode Technology, was that given to
21 a different analyst for a different type of testing?

22 A Yes. We decided it was worth a try to do
23 mitochondrial testing on the hair.

24 Q And is that a type of testing that you,
25 yourself, perform?

1 A No. That would not be me.

2 Q And why would it not be you?

3 A I was not trained in mitochondrial testing.

4 Q So that's sort of a specialized subset as far
5 as different training and different type of testing
6 that occurs?

7 A Yes.

8 Q Just in general terms, if you know, could you
9 explain to the jury sort of the difference between what
10 you've termed as nuclear or autosomal DNA versus
11 mitochondrial DNA?

12 A Yes. So very basically, the nuclear DNA is
13 the DNA that exists in the nucleus. The mitochondrial
14 DNA is the DNA that exists outside the nucleus in the
15 mitochondria. And the mitochondrial DNA is inherited
16 directly from the mother. So if you were to test
17 maternally related individuals, they would have the
18 same mitochondrial profile.

19 Q And that other analyst that conducted the
20 mitochondrial DNA, are you familiar with who that
21 person is?

22 A Yes. That was Tess Chart.

23 MR. LALLY: May I have one moment, Your Honor?

24 THE COURT: Sure.

25 MR. LALLY: Thank you very much. I have no

1 further questions.

2 MR. YANNETTI: We have no questions.

3 THE COURT: So you are all set, Mr. Bradford.
4 Thank you very much.

5 THE WITNESS: Thank you.

6 (Whereupon, the witness is excused.)

7 THE COURT: So, jurors, we will take our
8 luncheon break. We will have more witnesses this
9 afternoon. So let's take a 40-minute lunch.

10 (Whereupon, the jury is escorted from the courtroom
11 for the luncheon recess.

12 MR. LALLY: Your Honor, could we approach?

13 THE COURT: Yes. Can I see counsel, please?

14 (Whereupon, there was a sidebar conference as
15 follows:)

16 MR. LALLY: I'm just trying to figure out
17 timing for the afternoon. So do you -- counsel can
18 certainly obviously -- free to change your minds.
19 But I am just inquiring if counsel has any
20 inclination about whether you have no questions for
21 either of those witnesses or any questions with
22 Chart?

23 MR. YANNETTI: With Chart, I expect I will
24 have no questions. And then you have Porto after
25 that?

1 MR. LALLY: Correct.

2 MR. YANNETTI: I think Liza has not a lot of
3 cross-examination.

4 THE COURT: All right. So you'll get your
5 witnesses back on the plane tonight, right?

6 MR. LALLY: We will. That won't be a problem.

7 MR. LALLY: So my question is how does the
8 Court want me to proceed? Do you want me to see if
9 I can get another witness here after Mr. Porto?

10 THE COURT: I don't think so. How long are
11 you going to be with the first witness?

12 MR. LALLY: The first witness? Roughly the
13 same as that.

14 THE COURT: So 20 minutes, half an hour?

15 MR. LALLY: Twenty minutes.

16 THE COURT: And then the next witness?

17 MR. LALLY: And then a little bit longer just
18 as there is a little more testing than Mr. Porto
19 did.

20 THE COURT: All right. So it will probably be
21 sometime after three that we wrap up?

22 MR. LALLY: I would think.

23 THE COURT: Who would be your next witness?

24 MR. LALLY: I can check and see, because I had
25 initially told him Friday. Trooper Paul. But then

1 the issue is I have Ms. Hyde flying in, who is
2 actually here but is not scheduled -- she is
3 scheduled to land today and then testify tomorrow.
4 So I would want to start with her tomorrow just so
5 I can be done with her tomorrow.

6 THE COURT: Because I'd rather not start with
7 Trooper Paul.

8 MR. YANNETTI: Agreed. No.

9 (Whereupon, there was a luncheon recess.)
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A F T E R N O O N S E S S I O N

(Court resumes.)

(Defendant present. Jury present.)

THE COURT: Call your next witness, Mr. Lally.

MR. LALLY: Yes, Your Honor. The Commonwealth
calls Ms. Tess Chart to the stand.

Whereupon,

TESS CHART

having been first duly sworn, was examined and
testified under oath as follows:

THE COURT: Go right ahead, Mr. Lally.

MR. LALLY: Thank you, Your Honor.

DIRECT EXAMINATION

BY MR. LALLY:

Q Good afternoon, ma'am.

A Good afternoon.

Q Could you please state your name and spell
your last name for the jury?

A Sure. My name is Tess Chart, C-H-A-R-T.

Q And, Ms. Chart, what do you do for work?

A I'm a forensic DNA analyst at Bode Technology.

Q And where is Bode Technology located?

A It's in Lorton, Virginia.

Q I'm going to ask you some questions just a
little bit about your educational background starting

1 with your undergraduate work. Where did you go to
2 school and what, if any, degree did you receive in
3 relation to your undergraduate?

4 A Sure. I have my Bachelor of Science in
5 molecular biology from Millersville University in
6 Pennsylvania. And then I have my Master of Science in
7 forensic science from Towson University in Maryland.

8 THE COURT: Ms. Chart, I'm going to ask you to
9 keep your voice up really loud. Okay?

10 THE WITNESS: Sure.

11 BY MR. LALLY:

12 Q Ms. Chart, if it's at all helpful, that
13 microphone is adjustable. You can move it anywhere
14 you'd like.

15 Now, with reference to your master's in
16 forensic science, when about was it that you received
17 that?

18 A So I got my degree at the end of 2019.

19 Q And, following grad school, where did you go
20 from there?

21 A I was hired directly by Bode Technology.

22 Q And when was that?

23 A That was in July of 2019.

24 Q Now, when you started in July 2019 with Bode
25 Technology, what was your position at that time and

1 sort of what were your duties and responsibilities when
2 you initially began working there?

3 A So I started as a technologist. So that's
4 someone who will do all of the lab portion of the work
5 in a laboratory. And I helped out with our
6 humanitarian team. So helping identify human remains.
7 From there, I also helped with our criminal cases, as
8 well.

9 Q And, when you started your work there, what,
10 if any, sort of training did you undergo in relation to
11 your work at Bode?

12 A So when you first start at Bode Technology,
13 you actually go through a series of lectures and you
14 have a series of readings to go through all of the
15 science that you're going to learn and the background
16 of all of the technologies you're going to use.

17 From there, you will observe a qualified
18 analyst or a qualified person in the lab through
19 everything that you're going to be trained in. And,
20 from there, you'll get a series of sets. So there will
21 be mock samples that you will take through the lab and
22 do all of the testing on that you're going to be
23 trained in.

24 It starts out with having that qualified
25 analyst there with you, and you are able to ask

1 questions and troubleshoot as you go. From there,
2 you'll get a second set that will be no analyst with
3 you, but you're still allowed to ask questions at that
4 point.

5 And then your final set is something we call a
6 competency set. So you take it through the lab and
7 treat it just like you would any other case. And
8 you're not allowed to ask questions, and then you're
9 graded at the end.

10 If you pass that test, you can go through a
11 written exam and then a verbal exam. And then you
12 would take your results from your testing and you
13 defend it in a mock court sample. If you pass all of
14 those qualifications, you can become an analyst or be
15 qualified in whatever technique you're being trained
16 in.

17 Q And, as far as that sort of training process
18 went, how long was it from the time that you joined
19 Bode Technology to the time that you started doing the
20 work that you do now?

21 A It's been a rolling process of all of the
22 different trainings that I've had to go through. I'd
23 say it took me about nine months from when I started to
24 be qualified in everything that I do for mitochondrial
25 DNA testing. And then for analysis training, I think

1 it was another six months or so.

2 Q Now, as far as the lab at Bode Technology, is
3 that an accredited lab?

4 A Yes, it is.

5 Q And do you know from whom the lab receives its
6 accreditation?

7 A Yes. We receive an international
8 accreditation from an association called ANAB, which is
9 just a national standards organization. We are also
10 accredited by the FBI at their quality standards, as
11 well.

12 Q Ms. Chart, as far as your lab being
13 accredited, can you explain to the jury sort of what
14 that means and sort of what the process is for a lab to
15 be accredited?

16 A Sure. So all of our testing, all of the
17 things that we report are basically guidelines by an
18 outside body. So everything we do is established and
19 gone through before or as we go through the testing
20 procedures. So we are able to make sure that
21 everything that we do is standardized for the country,
22 all the testing that we perform.

23 Q And the lab that you work at, Bode Technology,
24 is that accreditation up to grade at this point?

25 A It is.

1 Q Now, with reference to your own work within
2 the lab, is there sort of standards of procedure or
3 protocols that you follow in conformity with that
4 accreditation?

5 A There are. We are under the same standards as
6 all of the other DNA testing at Bode for mitochondrial
7 DNA testing.

8 Q Now, with regard to your specific work, are
9 you familiar with what's called a proficiency test?

10 A Yes, I am.

11 Q And can you explain to the jury what that is
12 and what your experience has been with proficiency
13 testing as far as how often and what it consists of?

14 A So a proficiency test is how we stay qualified
15 and what we do in the laboratory. So we get an outside
16 test that we treat just like a regular criminal case.
17 We take it all the way through the laboratory and have
18 it reviewed, report our findings. And then it's sent
19 out and we're graded on that performance.

20 Q And, with reference to yourself, what, if any,
21 issues have you had with regard to proficiency testing
22 over the course of your years of work with Bode
23 Technology?

24 A I've had none.

25 Q Now, as far as -- am I correct in that Bode

1 Technology as far as the laboratory is concerned
2 essentially deals with being contracted for work from
3 external vendors?

4 A Yes.

5 Q And, by that, I mean as far as you get your
6 work or samples that are submitted from outside of your
7 lab, correct?

8 A We do.

9 Q And what are some of the types of
10 organizations as far as the case work that you deal
11 with, like where does it typically come from, what type
12 of agency?

13 A It can come from anywhere across the United
14 States. And we also have international clients, as
15 well.

16 Q Now, if I could turn your attention to a
17 specific case that you worked on. When items come into
18 Bode Technology as far as the lab, they go through sort
19 of a check-in process and a chain of custody process;
20 is that correct?

21 A Yes. That's correct.

22 Q And, with that, is there sort of a number or
23 something that's assigned to a specific sample that
24 follows it throughout the time that it's at your lab?

25 A Yes. We call that the evidence item number or

1 E- whatever number it's assigned.

2 Q Is there also a case number that's assigned as
3 far as different cases or different case submissions?

4 A Yes, there is.

5 Q And turning your attention to a specific case
6 that was submitted in January or partially submitted in
7 March of 2024, that came from the Norfolk District
8 Attorney's Office. Are you familiar with that?

9 A Yes, I am.

10 Q And the Bode case number on that was CCA2416-
11 0023; is that correct?

12 A That is correct.

13 Q Now, with reference to your work on this
14 specific case number, what were the items that you
15 received and sort of -- what were the items that you
16 received that you eventually did some testing or
17 analysis on?

18 A So I continued testing for one of the hair
19 samples.

20 Q And, specifically, again, that's given a
21 specific name as far as the hair sample in this case
22 was E01; is that correct?

23 A That is correct.

24 Q And that as far as for comparison purposes,
25 what, if anything, did you receive in regard to

1 comparison if you were able to generate a profile from
2 E01?

3 A We received a reference profile from the
4 victim, John O'Keefe.

5 Q Now, your specialty within the lab is in
6 mitochondrial testing; is that correct?

7 A Yes.

8 Q Could you explain to the jury as far as
9 mitochondrial DNA -- well, let me ask you this first:
10 Are you also familiar with the term known as autosomal
11 DNA?

12 A I am, yes.

13 Q If you could, Ms. Chart, explain to the jury
14 first what autosomal DNA is and then what mitochondrial
15 DNA is? And then I'll have another question after
16 that.

17 A Of course. So what many people are familiar
18 with is what we call autosomal DNA. So that is the DNA
19 that's actually stored in the nucleus of your cell.
20 You get half from your mother and half from your
21 father, and it's what makes you unique. It's what
22 people call the blueprint of a person.

23 But what might be a new concept is that there
24 is actually a second form of DNA that is stored within
25 the mitochondria of the DNA, of a cell.

1 So if you can remember maybe back to any
2 science classes that you had, the mitochondria is the
3 powerhouse of that cell. And, because of that, you can
4 have upwards of hundreds to thousands of mitochondria
5 within just one single cell. And within each of those
6 mitochondria you may have thousands of copies of that
7 mitochondrial DNA.

8 So in cases just like this one where there may
9 not be enough nuclear or autosomal DNA to find, you can
10 go back and try to test for that mitochondrial DNA.

11 Q And so if you could explain to the jury -- I
12 think you've alluded to it already, but sort of the
13 difference between autosomal DNA versus mitochondrial
14 DNA?

15 A So mitochondrial DNA, in contrast, is
16 inherited directly from your mother. So you will have
17 the same mitochondrial DNA profile as your mother and
18 then you will also have the same mitochondrial DNA
19 profile as any of your siblings. And it has that
20 maternal inheritance, we call it, that makes it
21 actually a great source for helping identify people.
22 But it can also be used for criminal cases, as well.

23 Q Now, first with respect to the autosomal DNA,
24 can you explain to the jury sort of the process as far
25 as just in general terms what is the process as far as

1 the testing goes or generation of profile?

2 A Sure. So we share similar processing methods.
3 So we'll start out by taking a small portion of
4 whatever is sent to the lab, and we call that a
5 sampling. We will take notes on that as to how much we
6 take forward through testing, and that will go into a
7 small tube. From there, we will extract the DNA or
8 take apart all of the cells by adding chemicals. And
9 what we are left with is what we call a DNA extract.
10 So that's actually where I came in in this case.

11 From there, the difference is we will go
12 through what is still called amplification, using the
13 PCR method. That will make a bunch of copies of that
14 DNA to be used later on. But, for mitochondrial DNA,
15 what we are targeting is specifically just the
16 mitochondrial DNA in that extract.

17 From there, we actually go to something that
18 is completely different from autosomal testing, which
19 is DNA sequencing. So DNA sequencing is really just a
20 way that we are able to take those small strands of DNA
21 that we amplified, and we are able to read them almost
22 like letters in a sentence.

23 Q And the PCR is in reference to the autosomal
24 DNA; is that correct?

25 A It's for both methods.

1 Q What does PCR stand for?

2 A It's polymerase chain reaction.

3 Q And, when you say as far as the sort of
4 quantification or -- I'm sorry. Is it quantification
5 or quantitation?

6 A Quantification.

7 Q Quantification. As far as the quantification
8 step is concerned, how is that sort of physically done?
9 What kind of instrumentality are you using to
10 accomplish that?

11 A So for mitochondrial DNA, we will actually run
12 the DNA after amplification on a gel. So a long,
13 really what it sounds like, a slab of gel, where we are
14 able to visualize if we obtained any mitochondrial DNA
15 as a band that shows up under a camera.

16 Q And so with reference to this sample, this
17 EO1, the hair sample, you received at what stage again
18 or what step?

19 A I received that as a DNA extract. So it was
20 an amount of liquid in a tube at that point.

21 Q And, as far as in general terms again if you
22 could explain to the jury sort of what are the steps
23 that go into the processing or analysis prior to that
24 step where you received it on the quantifications?

25 A So it went through sampling. It was received.

1 It was inventoried by the person that opened up the
2 evidence, and a small portion of the hair was put into
3 a tube. And then it went through that DNA extraction.
4 So the hair was dissolved and all of the DNA inside of
5 that hair was released and isolated to just be that DNA
6 extract.

7 Q And so from that point where you pick it up as
8 sort of the extract, what is it that you're doing with
9 that as far as your analysis goes from there and what
10 type of instrumentality are you using to perform that
11 analysis from there?

12 A So from there, I am targeting and just trying
13 to find if there is any mitochondrial DNA in that
14 sample. So we will use the PCR method to amplify to
15 see if there is any mitochondrial DNA we can target.
16 And then I will take it through and visualize it on
17 that gel to make sure -- to see if we got anything.
18 That is our quantification step. And then after that,
19 I will take it through our sequencing step. And we do
20 load that on an instrument called the 3130 genetic
21 analyzer.

22 Q And the 3130 genetic analyzer, how does that
23 work?

24 A So it actually runs and separates each of the
25 fragments of DNA that we have amplified and visualizes

1 it through a program so we are able to read each letter
2 of your DNA sequence.

3 Q If I could take you back just a step, are you
4 familiar with a term within your field called a D-loop?

5 A Yes.

6 Q And can you explain to the jury what a D-loop
7 is and how that factors into your analysis or testing
8 for mitochondrial DNA?

9 A So the D-loop is actually the region of the
10 mitochondrial genome that we target. It is targeted
11 because it does not contain any useful areas for the
12 actual function of a mitochondria. So it can change
13 over time, and those changes are what actually are
14 recorded as your mitochondrial DNA profile.

15 Q Now, as far as the D-loop, what, if any,
16 relationship does that have with respect to certainly
17 the variables within the human population?

18 A Would you be able to word that --

19 Q Very poorly put. Let me rephrase.

20 The D-loop, as far as the region is concerned,
21 what, if anything, does that have to do with certain
22 variabilities within the human population?

23 A Oh, yes. So because there is this variability
24 in that region, it can change over time. And, from
25 that, there are different mitochondrial DNA profiles

1 that are developed across the world.

2 Q Now, in addition to the extract from the hair
3 sample E01, what, if any, other items did you receive
4 in regard to comparison purposes?

5 A So we also received that reference sample from
6 the victim, and that was taken forward for
7 mitochondrial DNA testing, as well.

8 Q And just for clarity purposes, when you say
9 "reference sample from the victim," you're referring to
10 John O'Keefe; is that correct?

11 A Yes.

12 Q And the reference sample that you received in
13 regard to John O'Keefe, was that already an extract, as
14 well, or what, if anything, did you have to do with
15 that in order to obtain a mitochondrial DNA profile?

16 A So that sample was received -- if I can refer
17 to my notes?

18 Q Sure.

19 A So I was not the person to actually do the
20 sampling for this sample. It was received as a small
21 cutting of a swab.

22 Q And so as far as the small cutting from the
23 swab, what is sort of -- as far as creating a profile
24 from that and creating a profile from the extract from
25 the hair sample, as well, was there any difference in

1 sort of how those two mitochondrial DNA profiles were
2 created?

3 A No. They were tested the same way.

4 Q And, based -- well, let me ask this: As far
5 as with regard to the hair sample, E01, were you able
6 to obtain a mitochondrial DNA profile for the hair?

7 A We were.

8 Q And, with respect to Mr. O'Keefe's sample,
9 were you also able to obtain a mitochondrial DNA
10 profile from Mr. O'Keefe's sample?

11 A Yes, we were.

12 Q Now, as far as for comparison purposes, what,
13 if anything, did you look at and what, if any,
14 comparison or opinions or conclusions did you draw from
15 that comparative analysis?

16 A Sure. I can state directly from my report if
17 that's all right.

18 THE COURT: All right.

19 THE WITNESS: So the mitochondrial profile
20 that was obtained from the sample, the hair sample,
21 was consistent with the mitochondrial DNA profile
22 obtained from John O'Keefe. So, therefore, John
23 O'Keefe cannot be excluded as a possible
24 contributor of that hair.

25 BY MR. LALLY:

1 Q Now, Ms. Chart, are you also familiar with
2 something called an EMPOP? And, for the record, that's
3 E-M-P-O-P?

4 A I am.

5 Q And can you explain to the jury what that is
6 and how that's used as far as any sort of statistical
7 analysis in reference to comparative -- comparisons?

8 A So it's an international populations database
9 that houses different mitochondrial DNA profiles.

10 Q And how is it sort of used within your field
11 and how did you use it in this specific instance in
12 relation to the consistency opinion between the hair
13 sample and Mr. O'Keefe's sample?

14 A So we were able to upload the profile from the
15 hair and see if it was found at all within the
16 population database. We test populations that are
17 popular within the United States to narrow it down.
18 And, within the African-American, U.S. Caucasian and
19 U.S. Hispanic databases that they have, it was not seen.

20 Q And what, if any, conclusions or opinions are
21 you then able to formulate with reference to the
22 consistency of the hair sample versus Mr. O'Keefe's
23 sample with relation to that EMPOP database?

24 A Sure. So by not seeing it in the database,
25 this means that we are able to exclude at least 99.895

1 percent of the population from being a source of that
2 evidence.

3 Q And is there a certain level or percentage of
4 competence statistically that comes along with that
5 exclusion of 99.895 percent of the U.S. population?

6 A Yes. We use what is called the 95-percent
7 confidence interval. It is actually a rule that is
8 used for making statistical statements about
9 populations. It is because there are always outliers
10 that we don't include. We take the 95-percent majority
11 of a population when you run those statistics.

12 Q And so again, as far as your opinion or
13 conclusions based on the comparison, is that the
14 mitochondrial profile from the hair sample was
15 consistent with the mitochondrial DNA profile for
16 Mr. O'Keefe's sample, correct?

17 A Correct.

18 Q And that's with a 95-percent confidence; is
19 that correct?

20 A That is correct.

21 Q And that's the exclusion of at least 99.895
22 percent of the population of the United States,
23 correct?

24 A Correct.

25 MR. LALLY: Thank you, ma'am. I have nothing

1 further.

2 MR. YANNETTI: We have no questions, Your
3 Honor.

4 THE COURT: All right. Ms. Chart, you are all
5 set. Thank you very much.

6 THE WITNESS: Thank you, Your Honor.

7 THE COURT: Your next witness, Mr. Lally?

8 MR. LALLY: Yes, Your Honor. The Commonwealth
9 would call Mr. Andre Porto to the stand.

10 THE COURT: All right.

11 Whereupon,

12 ANDRE PORTO

13 having been first duly sworn, was examined and
14 testified under oath as follows:

15 THE COURT: Whenever you're ready, Mr. Lally.

16 MR. LALLY: Thank you, Your Honor.

17 DIRECT EXAMINATION

18 BY MR. LALLY:

19 Q Good afternoon, sir.

20 A Good afternoon.

21 Q First, let me just say just for clarification,
22 that microphone in front of you is adjustable. You can
23 move it up and down any which way you'd like.

24 Good afternoon, sir. Could you please state
25 your name and spell your last name for the jury?

1 A Yes. My name is Andre Porto, last name
2 spelled P-O-R-T-O.

3 Q And what do you do for work, sir?

4 A I am a Forensic Scientist II at the
5 Massachusetts State Police Crime Lab in the DNA Unit.

6 Q And, sir, if I could ask you just a few
7 questions about your educational background, starting
8 with your undergraduate work. Where did you go to
9 school and what, if any, degrees did you receive from
10 them?

11 A I received a Bachelor of Science Degree in
12 Microbiology at the University of Massachusetts in
13 Amherst. And then -- yes.

14 Q Where did you go from there?

15 A I went to the Boston University School of
16 Medicine, and I got a Master of Science in Biomedical
17 and Forensic Sciences.

18 Q And about what year was that that you received
19 that Master's?

20 A I graduated in 2019.

21 Q And then following receipt of your master's,
22 where did you go from there?

23 A I went to the Massachusetts State Police Crime
24 Lab.

25 Q And, when you joined the Massachusetts State

1 Police Crime Lab initially, what was your title and
2 sort of what were your duties and responsibilities with
3 relation to that title?

4 A So I joined as a Forensic Scientist I, and
5 that is a training position where I underwent a
6 training program that consisted of a bibliography with
7 multiple journal articles and textbooks, as well as
8 conducting the lab processing on training samples.

9 Q And that sort of initial work that you did,
10 that's referred to as an FS-I; is that correct?

11 A Yes.

12 Q And that initial work that you did as an FS-I,
13 how long did you do that before you became a Forensic
14 Scientist II?

15 A The training, itself, was approximately six to
16 eight months. And then within a year, I was promoted
17 to an FS-II.

18 Q And, when you were promoted to work as an FS-
19 II, what, if any, specific unit were you assigned to
20 within the lab?

21 A The DNA unit.

22 Q And have you essentially been with the DNA
23 unit since that assignment initially occurred?

24 A Yes.

25 Q Now, just a few questions about the lab at the

1 state police crime laboratory. Is that lab accredited
2 by anybody?

3 A Yes. We are accredited by ANAB. And that
4 stands for ANSI National Accreditation Board. And the
5 ANSI stands for American National Standards Institute.

6 Q And, with reference to that accreditation, can
7 you describe to the jury just a little bit about
8 generally in terms of what goes into accreditation of a
9 lab from ANAB?

10 A Yes. So this organization, ANAB, they came
11 into our lab and they reviewed all of our protocols,
12 ranging from facility security, the protocols that we
13 do in the lab to staff education and training and to
14 make sure that we are meeting all the standards that we
15 are being accredited to.

16 Q And the lab at MSPCL, it's accreditation, is
17 it up to date at this point?

18 A Yes.

19 Q Now, with reference to yourself, personally,
20 sir, in regard to your casework and in regard to your
21 training, are you familiar with the term "proficiency
22 testing"?

23 A Yes.

24 Q And can you explain to the jury what that is
25 and sort of how often and what consists of the

1 proficiency testing that you've undergone?

2 Q Yes. So a proficiency test is given on a
3 semi-annual basis, so twice a year, by an outside
4 agency. And we don't know what the results are, and we
5 treat it as a regular case. So we undergo -- we take
6 it through the regular DNA processing and we have to
7 pass that proficiency test to show that we maintain our
8 competency in whatever work we are doing in casework.

9 Q Sir, as far as the proficiency testing that
10 you've undergone, what have been the results of your
11 proficiency testing?

12 A I've passed all of mine.

13 Q Now, sir, it may be a term that's pretty well
14 understood, but if you could explain to the jury, at
15 least based on your training and experience, what your
16 understanding is of a couple of different terms. And,
17 first, what I'm going to start with is DNA, itself.
18 What is DNA?

19 A Yes. So DNA stands for deoxyribonucleic acid,
20 and that is basically the genetic blueprint that makes
21 us who we are. And we each have two copies of it. We
22 inherit one from our mom and one from our dad. And
23 that combination makes us unique. With the exception
24 of identical twins, everybody has a different DNA.

25 Q And is DNA the same in every cell of a

1 person's body?

2 A Yes. Barring any rare mutations, the DNA is
3 the same. So if you take a blood sample and a saliva
4 sample from the same person, the DNA should be the
5 same.

6 Q What I'm going to ask you now is just a little
7 bit about the process of DNA and how it's tested within
8 your lab. Am I correct in saying that there is
9 essentially four steps; is that correct?

10 A Correct.

11 Q And approaching sort of chronologically, one
12 of the steps is called extraction, correct?

13 A Yes.

14 Q Can you explain to the jury how it is
15 specifically that DNA is extracted by yourself in
16 general terms when you're testing an item?

17 A Yes. For the extraction step, I received the
18 samples. They are in like small tubes that are closed.
19 I will add a set of reagents to it, apply heat to that
20 sample, and that will actually burst open the cells to
21 make the DNA available for use.

22 Q Now, when you are extracting from a sample, do
23 you know or is there a way to sort of measure how much
24 DNA you're extracting from a sample?

25 A Yes.

1 Q And can you explain sort of how it is that you
2 know that?

3 A Yes. So that's the second step that we call
4 quantitation. And we take a small portion of that DNA
5 that we extracted and we'll apply a different set of
6 reagents and run it through an instrument that heats
7 and cools down the sample. It goes through a cycle and
8 allows us to estimate how much DNA is extracted.

9 Q Now, sir, what is PCR?

10 A PCR stands for polymerase chain reaction, and
11 it's basically known as molecular Xeroxing, where it's
12 making millions of copies of specific areas that you
13 can target of DNA.

14 Q Is that essentially the third step that you
15 undergo?

16 A Correct.

17 Q Now, what is STR?

18 A It stands for short tandem repeat. And these
19 are locations in the DNA that change. Each person is
20 comprised of small little repeats in each person.
21 However, repeats you have at that location is sort what
22 would show up in your DNA profile.

23 Q Now, how is it with your work in the lab that
24 you identify DNA fragments?

25 A It's the fourth step, what we call detection,

1 where after we amplified the specific areas that we are
2 looking at in the DNA, we'll run it through an
3 instrument that will separate them out and generate the
4 DNA profile.

5 Q Now, within your work in the lab, are you
6 familiar with terminology as far as a known item versus
7 a questioned item?

8 A Yes.

9 Q And can you explain what each of those mean in
10 reference to your field and your work and sort of what
11 is the difference between the two?

12 A Yes. So a known item is an item that's
13 collected directly from an individual and is to be used
14 for comparison purposes whereas a questioned item is
15 collected from let's say a crime scene where we don't
16 know the source.

17 Q Now, as far as your lab or your unit within
18 the lab, are there -- the DNA unit, itself, does it
19 follow sort of standardized policies and protocols?

20 A Yes, we do.

21 Q And who approves of those particular policies
22 and protocols or procedures?

23 A Our technical leader.

24 Q Now, could you explain the process used to
25 analyze the evidence in this case?

1 A Yes. So the evidence in this case underwent
2 that four-step process I just described, which was
3 extraction to quantitation to amplification, detection
4 and then interpretation of the profile that was
5 generated.

6 Q Now, what are some of the controls or what do
7 you use during the course of your testing?

8 A Yes. So there are two types of controls,
9 positive and negative controls. So a positive control
10 is a sample with a known DNA profile that we use to
11 show that each step in the process worked as expected.
12 And a negative control is a sample that has no DNA in
13 it and it only receives the reagents that we are using.
14 And that is to show that there is no inherent
15 contamination of the reagents that we use.

16 Q Now, let me ask you, sir, if you know, what
17 are some of the ways to prevent sort of DNA transfer
18 from yourself or from someone else working on the case
19 or from other samples that you may be working on with
20 other cases?

21 A Yes. So there are many ways. One way is to
22 clean the workspace before you start working and after
23 just to make sure that it's constantly being cleaned.
24 Another way is to wear lab PPE, so personal protective
25 equipment, like lab coats, face masks and hairnets.

1 And another one is to make sure that we only have one
2 tube open at a time so that we don't have any cross-
3 contamination between samples.

4 Q Now, your work specifically, sir, does it
5 undergo some sort of review process?

6 A Yes, it does.

7 Q And, specifically, your work in this case, did
8 it undergo that same sort of general review process
9 pursuant to the policies and procedures you were
10 speaking about before?

11 A Yes, it did.

12 Q Now, when a case comes into the Massachusetts
13 State Police Crime Lab, it's assigned a specific case
14 number, correct?

15 A Correct.

16 Q In this instance, I'm referring to a case
17 number entitled 22-02184. Are you familiar with that
18 case?

19 A I am.

20 Q And you tested a number of different items
21 within that case, correct?

22 A Correct.

23 Q Now, as far as the items are concerned,
24 similar to how items from a specific investigation or
25 case are assigned a case number, are those different

1 items assigned different item numbers, as well?

2 A Yes, they are.

3 Q And if there is something that is taken,
4 swabbed or cut or something from a specific item, how
5 is that labeled in relation to the item that it was
6 taken from?

7 A So basically -- so let's say we have a parent
8 item that's labeled 2-1. Then if we take a cutting of
9 that item, it would be called -- if it's the first
10 cutting, it would be called 2-1.1.

11 Q Now, in this case, sir, was a known standard
12 processed?

13 A Yes, it was.

14 Q And can you explain to the jury sort of how
15 that process occurs in regard to processing a known
16 standard?

17 A Yes. So the lab processing is the same where
18 it undergoes the same four-step process. And a
19 qualified analyst then looked at the DNA profile that
20 was generated to make sure that it was a single source
21 profile, meaning that at each location that we looked
22 at, there were only one or two peaks. And, after that,
23 it underwent the technical and administrative review
24 process before it was closed out and ready for use, for
25 comparison.

1 Q And do you know whose known DNA standard was
2 processed in this case?

3 A Yes.

4 Q And who is that?

5 A A known blood standard from John O'Keefe.

6 Q Now, as far as your involvement in this case,
7 what was your involvement in this case?

8 A I performed the testing of the questioned
9 items.

10 Q And did you have occasion to perform DNA
11 analysis on certain items submitted to your lab in
12 connection with this case?

13 A Yes, I did.

14 Q Let me ask you about some specific items.
15 Were you asked to perform some analysis on an item
16 labeled 3-1.1?

17 A Yes, I was.

18 Q And, if you know, what was that a sample from?

19 A Would I be able to refer to my notes?

20 THE COURT: Yes.

21 THE WITNESS: So that was a sample from
22 passenger side taillight.

23 BY MR. LALLY:

24 Q And, with respect to that, there was a sample
25 or DNA profile that was generated from that swab from

1 the taillight, correct?

2 A Correct.

3 Q And what, if anything, were the findings or
4 what kind of -- what was the conclusion of the analysis
5 of the profile from the swab taken from the taillight
6 of the vehicle?

7 A The DNA profile was interpreted as a three-
8 person mixture including male DNA.

9 Q To be more specific, when an item comes in and
10 it's assigned an item number, there is also a
11 description that's provided along with sort of where
12 the item came from?

13 A Correct.

14 Q And so specifically, Item 3-1.1 is a sample
15 from a passenger-side taillight, and it gives a
16 specific Massachusetts registration plate of 3GC 684,
17 correct?

18 A Correct.

19 Q And so from the analysis of the swab or the
20 profile that was obtained from the swab of the
21 taillight, what, if anything, was that compared to?

22 A John O'Keefe.

23 Q So the sample from Mr. O'Keefe?

24 A Correct.

25 Q And, with regard to that, is that a

1 comparative analysis that you conducted yourself?

2 A Yes.

3 Q And what, if any, opinions or conclusions did
4 you come to as far as the comparative analysis between
5 the swab from the taillight from that vehicle and the
6 profile from Mr. O'Keefe?

7 A The DNA profile from this item is at least 510
8 nonillion times more likely if it originated from
9 John O'Keefe and two unknown individuals than if it
10 originated from three unknown, unrelated individuals.
11 And this provides support for an inclusion.

12 Q Now, sir, with reference to that item and that
13 comparative analysis, you said 510 nonillion times; is
14 that correct?

15 A Correct.

16 Q And nonillion, just for clarification
17 purposes, do you know how many zeros that is?

18 A It's a one followed by 27 zeros.

19 Q And with regard to that item coming from -- or
20 the profile containing the comparative analysis
21 consistent with the DNA profile of Mr. O'Keefe, there
22 are also two unknown contributors; is that correct?

23 A Correct.

24 Q Now, with regard to that, are you familiar
25 with that item or the profile from that item being

1 submitted along with some other samples to an outside
2 vendor called Bode Technology?

3 A Correct.

4 Q Now, with reference to another item contained
5 within that, are you familiar with an Item 3-6?

6 A Yes.

7 Q And what is Item 3-6?

8 A That is the root end of hair from exterior
9 passenger side rear panel.

10 Q Now, sir, as far as hair is concerned, can you
11 describe for the jury a little bit about sort of DNA
12 and how that works between -- well, let me ask you
13 this: Essentially, when it comes to a hair sample,
14 there's typically going to be a root end and a shaft
15 end, correct?

16 A Correct.

17 Q And where from the DNA, as your lab is
18 concerned, where is that -- where would you be able to
19 test from or where would you be looking to extract a
20 sample from in order to perform testing?

21 A Yes. So our testing for hairs, the DNA would
22 be coming from any tissue that might be attached to the
23 root end of the hair.

24 Q And so you're looking for specifically sort of
25 follicular tissue; is that correct?

1 A Tissue that's attached to the hair, yes.

2 Q Now, as far as -- are you familiar with the
3 terms sort of autosomal DNA versus mitochondrial DNA?

4 A Yes, I am.

5 Q And can you explain for the jury briefly just
6 sort of what your understanding is of each of those two
7 terms and what, if any, differences there are between
8 the two?

9 A Yes. So autosomal DNA is present in the
10 nucleus of the cell. We inherit one copy from our dad
11 and one copy from our mom. Mitochondrial is present
12 within the mitochondria, and that is inherited via the
13 mother.

14 Q Now, your lab at the Massachusetts State
15 Police Crime Laboratory, is the lab equipped or does
16 your lab do mitochondrial DNA testing?

17 A We are not equipped to do mitochondrial
18 testing.

19 Q So when you say the lab is not equipped to do
20 the testing, what exactly does that mean?

21 A So we don't have the instruments or the
22 facilities to do that testing, and we don't get that
23 testing requested very often. So it's more -- it makes
24 more sense to send it out to an approved vendor to do
25 that testing.

1 Q And one of those approved vendors would be the
2 Bode Technology lab in Lorton, Virginia that you were
3 discussing previously?

4 A Correct.

5 Q And, as far as your understanding, is that
6 Bode Technology is equipped and does do mitochondrial
7 DNA testing, correct?

8 A Correct.

9 Q Now, with respect to your testing, you did
10 some testing with regard to Item 3-6, the hair; is that
11 correct?

12 A Correct.

13 Q And can you explain to the jury sort of what
14 that testing was and what, if any, opinions or
15 conclusions you were able to draw from the testing that
16 you were able to do in the lab?

17 A Yes. So that testing began the same as the
18 four-step process. I would extract the hair and then
19 went to quantitation. After quantitation, I determined
20 that there was no human DNA detected. So then testing
21 was halted at that step.

22 Q And so what, if anything, was the result of
23 that testing that you conducted with regard to the
24 hair?

25 A That no human DNA was detected. So STR

1 analysis was not performed.

2 Q Now, that phraseology there as far as no human
3 DNA detected, what does that mean?

4 A So quantitation is looking specifically for
5 human DNA, and we couldn't detect that with our
6 instruments. It's not speaking to the hair, itself.
7 It's just that we cannot detect any human DNA.

8 Q So that's not so much to say that there is no
9 DNA on the hair. It's just that it is below the level
10 of detection that you're qualified to report on; is
11 that fair to say?

12 A You're correct.

13 Q Now, with regard to the taillight sample, if I
14 could step back to that for a second. The 510
15 nonillion times, what, if any, relationship does that
16 have to sort of the overall world human population?

17 A So the world population currently I think is
18 about eight billion, which is an eight followed by nine
19 zeros. And 510 nonillion has 27 -- 30 zeros in it. So
20 it's larger.

21 Q Significantly more, correct?

22 A Significantly larger, yes.

23 Q Now, sir, if I could turn your attention to
24 some other items that you tested in relation to this
25 case. Just to be clear, sir, you conducted or issued

1 about six different DNA reports in regard to the
2 testing that you conducted in this case; is that
3 correct?

4 A Correct.

5 Q So if I could direct your attention now to the
6 six reported DNA testing, Report No. 6, that involved
7 an item called 3-3.1; is that correct?

8 A Correct.

9 Q And what is the description of that item?

10 A That is a sample from apparent glass on rear
11 bumper.

12 Q And with the same Mass. registration plate as
13 the taillight; is that correct?

14 A Correct.

15 Q And what, if any, conclusions or opinions were
16 you able to draw from your analysis of testing on that
17 particular item, please?

18 A So at the quantitation step for this item,
19 insufficient human DNA was detected and STR analysis
20 was not performed.

21 Q And, again, just as far as that statement is
22 concerned, can you explain a little bit to the jury
23 what that means as far as what your opinions or what
24 you're seeing in regard to insufficient human DNA
25 detected and STR analysis not performed?

1 A Yes. So at the quantitation step, we do have
2 a cutoff, a certain value where if we detect human DNA,
3 that's below this cutoff, we've validated that it's not
4 going to -- most likely not going to provide a profile
5 that could be used. So we halt testing at that step.

6 Q Now, sir, if I could direct your attention to
7 your fifth report that you issued in this case, DNA
8 Testing Report No. 5. And does that sort of contain
9 the totality of the items that you analyzed in this
10 particular case?

11 A It does.

12 Q Now, sir, if I can direct your attention to an
13 item labeled as No. 3-2.1.1. And what is the
14 description for that particular item, sir?

15 A That is a sample from exterior of broken
16 drinking glass.

17 Q And with reference -- were you able to
18 generate a DNA profile from the swab or the sampling
19 from that item?

20 A Yes.

21 Q And what, if any, comparison were you able to
22 do in regard to the DNA profile of Mr. O'Keefe?

23 A Yes. So the sample was interpreted as a
24 mixture of three contributors and the DNA profile for
25 this item is at least 530 nonillion times more likely

1 if it originated from John O'Keefe and two unknown
2 individuals than if it originated from three unknown,
3 unrelated individuals, and this provides support for an
4 inclusion.

5 Q And so the sample from the exterior or the
6 broken drinking glass is at least 530 nonillion times
7 more likely that it originated from John O'Keefe,
8 correct?

9 A Correct.

10 Q Now, if I could direct your attention to Item
11 7-1.2.1. What is the description associated with that
12 item, sir?

13 A That is a sample from Stain "A" on upper right
14 leg of jeans.

15 Q And were you able to generate a DNA profile
16 from the sample from what's labeled as Stain "A" on the
17 upper right leg of Mr. O'Keefe's jeans?

18 A I was.

19 Q What, if any, comparison were you able to do
20 with relation to that profile from that sample to
21 Mr. O'Keefe's DNA profile?

22 A Yes. So the DNA profile was interpreted as a
23 mixture of three contributors, including male DNA.
24 Contributor 1 was suitable for comparison. And, due to
25 limited information, Contributors 2 and 3 were not

1 suitable for comparisons. And the DNA profile from
2 this item is at least 570 nonillion times more likely
3 if it originated from John O'Keefe and two unknown
4 individuals than if it originated from three unknown
5 individuals. And this provides support for an
6 inclusion.

7 Q And so when you say as far as due to limited
8 information Contributors 2 and 3 are not suitable for
9 comparison, what does that mean?

10 A So that just means that those contributors
11 were very low and that any comparisons that would be
12 done to them would not be reliable based on our
13 protocols and validations.

14 Q And so from your comparative analysis, you
15 came to the opinion or conclusion that the sample from
16 the upper right leg of Mr. O'Keefe's jeans was 570
17 nonillion times more likely that it originated from
18 Mr. O'Keefe, correct?

19 A Could you rephrase that?

20 Q Sure. With respect to your comparative
21 analysis of the profile from the sample from Stain "A"
22 on the upper right leg of Mr. O'Keefe's jeans, your
23 opinion is that it was at least 570 nonillion times
24 more likely that it originated from John O'Keefe,
25 correct?

1 MS. LITTLE: Objection.

2 THE COURT: Sustained.

3 BY MR. LALLY:

4 Q What was your conclusion as it came to Item
5 7-1.2.1?

6 A So the DNA profile from this item is at least
7 570 nonillion times more likely if it originated from
8 John O'Keefe and two unknown individuals than if it
9 originated from three unknown, unrelated individuals,
10 and this provides support for an inclusion.

11 Q Sir, let me break from this for a second, and
12 I just want to ask you a little bit about transfer DNA.
13 Are you familiar with that term?

14 A Yes.

15 Q And can you explain to the jury what you
16 understand that term to mean?

17 A So transfer DNA just means DNA that sort of
18 transfers based on just some activity that could
19 happen. Like if somebody touches a water bottle, they
20 might transfer some DNA onto that water bottle.

21 Q Now, from the fact that DNA is on something or
22 on an item and it matches a profile from an individual,
23 is there anything from that that you can opine or
24 conclude as to how that DNA was deposited or when?

25 A No, I cannot.

1 Q Now, with reference to factors that may cause
2 a degradation of a DNA sample or a touch DNA sample
3 that's left, what, if any, are some of the factors that
4 may affect that as far as causing degradation of a
5 sample or causing an inability for you to be able to
6 generate a DNA profile from --

7 A Some factors include being exposed to heat for
8 a long time and ultraviolet rays from the sun as well
9 as just time, it might eventually lead to some
10 degradation.

11 Q Now, as far as items that are outside, you
12 indicated that being hot or warm temps might have some
13 effect on it. What, if any, impact would cold
14 temperatures have on it?

15 A So we store our DNA extracts in a cold room.
16 So cold temperatures could be very good to help
17 preserve any DNA that's on there.

18 Q Now, if I could turn your attention back to
19 your Report No. 5 and ask you with reference to Item
20 7-1.3.1. What is the description for that item, sir?

21 A That is a sample from Stain "B" on upper right
22 leg of jeans.

23 Q Again, those would be the jeans of
24 Mr. O'Keefe; is that right?

25 A Correct.

1 Q And you were able to generate a DNA profile
2 from that sample, as well?

3 A Correct.

4 Q And what, if any, comparison were you able to
5 do between the profile from that DNA on the upper right
6 leg of Mr. O'Keefe's jeans and Mr. O'Keefe's DNA?

7 A So the DNA profile was interpreted as a
8 mixture of three contributors including male DNA. And
9 the DNA profile from this item is at least 660
10 nonillion more times if it originated from John O'Keefe
11 and two unknown individuals than if it originated from
12 three unknown, unrelated individuals. And this
13 provides support for inclusion.

14 Q Now, next, if I could turn your attention to
15 Item 7-1.4.1. And what is that item or sample from?

16 A That is a sample from Stain "C" on upper right
17 leg of jeans.

18 Q And those jeans would be Mr. O'Keefe's jeans,
19 as well?

20 A Correct.

21 Q And were you able to then generate a DNA
22 profile from that sample?

23 A Yes.

24 Q And what, if any, comparison or what, if
25 any, conclusions or opinions did you draw from a

1 comparative analysis of the DNA profile from that
2 sample from the upper right leg of Mr. O'Keefe's jeans
3 and Mr. O'Keefe's DNA profile?

4 A So the DNA profile is a mixture of at least
5 two contributors including male DNA. Contributor 1 is
6 suitable for comparison and due to limited information,
7 Contributor 2 is not suitable for comparison. The DNA
8 profile was interpreted as a mixture of two
9 contributors. And the DNA profile of this item is at
10 least 830 nonillion times more likely if it originated
11 from John O'Keefe and an unknown individual than if it
12 originated from two unknown, unrelated individuals.
13 And this provides support for an inclusion.

14 Q Now, sir, if I could turn your attention to
15 Item 7-1.5.1. Where did that come from?

16 A That is a sample from Stain "D" on upper right
17 leg of jeans.

18 Q And, again, were you able to generate a DNA
19 profile for that sample?

20 A Yes.

21 Q What, if anything, were your findings in
22 relation to a comparative analysis between that and the
23 -- the DNA profile from that sample and the DNA profile
24 of Mr. O'Keefe?

25 A The DNA profile was interpreted as a mixture

1 of two contributors including male DNA. And the DNA
2 profile for this item is at least 670 nonillion times
3 more likely if it originated from John O'Keefe and two
4 unknown individuals than if it originated from three
5 unknown, unrelated individuals. And this provides
6 support for an inclusion.

7 Q Sir, if I could turn your attention to Item
8 7-1.6.1. And what is the description for that item?

9 A That is sample from Stain "E" on upper right
10 leg of jeans.

11 Q And were you able to also generate DNA profile
12 from that sample?

13 A Yes.

14 Q Did you then conduct a comparative analysis
15 between the DNA profile from that sample and the DNA
16 profile from Mr. O'Keefe?

17 A Yes.

18 Q And what, if any, conclusions or opinions or
19 findings did you have in regard to that comparative
20 analysis?

21 A Yes. So the DNA profile was interpreted as a
22 mixture of two contributors including male DNA.
23 Contributor 1 is suitable for comparison; and, due to
24 limited information, Contributor 2 was not suitable for
25 comparison. The DNA profile from this item is at least

1 one decillion times more likely if it originated from
2 John O'Keefe and an unknown individual than if it
3 originated from two unknown, unrelated individuals.
4 And this provides support for an inclusion.

5 Q Now, as far as that decillion, again, similar
6 to the nonillion, how many zeros are we talking about?

7 A That's a one followed by 33 zeros.

8 Q Now, if I could turn your attention to Item
9 7-1.7.1, are you familiar with that item, sir?

10 A Yes.

11 Q And what is the description for that item?

12 A That is sample from unstained areas of
13 exterior of jeans.

14 Q And were you able to generate a DNA profile
15 from that sample?

16 A Yes.

17 Q Similarly, were you then able to do a
18 comparative analysis between the DNA profile from that
19 sample and the DNA profile of Mr. O'Keefe?

20 A Yes.

21 Q And what, if anything, were your findings in
22 regard to that comparative analysis?

23 A Yes. The DNA profile was interpreted as a
24 mixture of four contributors including male DNA. The
25 DNA profile from this item is at least 53 septillion

1 times more likely if it originated from John O'Keefe
2 and three unknown individuals than if it originated
3 from four unknown, unrelated individuals. This
4 provides support for an inclusion.

5 Q And, similarly, sir, with regard to that
6 number septillion, how many zeros is that?

7 A That is a one followed by 24 zeros.

8 Q I am going to ask some questions about a
9 number of different items from 7-17. These are samples
10 taken from an orange tee shirt as well as a gray long-
11 sleeve shirt; is that correct?

12 A Correct.

13 Q And, if you could, essentially you did testing
14 on those items as well as some fingernail clippings
15 belonging to Mr. O'Keefe?

16 A Correct.

17 Q Or samples from the fingernail clippings, I
18 should say?

19 A Yes.

20 Q Now, with regard to those items, swabbings
21 taken from the stains from various areas of the orange
22 tee shirt -- and, just in general, where were those
23 areas on the tee shirt, the orange tee shirt to start
24 with, that the swabbings were taken from?

25 A The top front left of orange shirt and front

1 bottom right of the shirt, as well, and the back left
2 shoulder of the orange shirt.

3 Q Now, with regard to the gray long-sleeve
4 shirt, where are the areas on the shirt where those
5 swabbings were taken from?

6 A The right sleeve, the center front, the back
7 left, the back right and the back bottom of right.

8 Q And were you able to generate DNA profiles
9 from each of those items?

10 A I was.

11 Q And were you then able to do a comparative
12 analysis between the DNA profile from each of those
13 items with relation to the DNA profile from
14 Mr. O'Keefe?

15 A I was.

16 Q And what, if any, conclusions were you able to
17 draw from that comparative analysis?

18 A So the male DNA profile was interpreted as
19 originating from a single contributor, and the DNA
20 profile from these items is at least 490 octillion
21 times more likely if it originated from John O'Keefe
22 than if it originated from an unknown, unrelated
23 individual. This provides support for an inclusion.

24 Q And, as far as that number is concerned,
25 octillion, how many zeros is in an octillion?

1 A That's a one followed by 27 zeros.

2 Q And, with regard to each of those items from
3 the orange tee shirt, the gray long-sleeve tee shirt
4 and the fingernail clippings, they were taken from both
5 the right and left hands of Mr. O'Keefe; is that
6 correct?

7 A Correct.

8 Q And so that's 490 followed by 27 zeros. That
9 would be from a single contributor, correct?

10 A Correct.

11 Q Now, sir, if I could turn your attention to
12 Item 7-18.4.1. Are you familiar with that item?

13 A Yes.

14 Q And what is the description associated with
15 that item?

16 A Sample from Stain "C" on top front gray long-
17 sleeve shirt.

18 Q And were you able to generate a DNA profile
19 with respect to that item?

20 A Yes.

21 Q And were you able to do that and do a
22 comparative analysis between that DNA profile from that
23 item and the DNA profile of Mr. O'Keefe?

24 A Yes, I was.

25 Q And what, if any, conclusions did you come to

1 with regard to that?

2 A The male DNA profile was interpreted as
3 originating from a single contributor. The DNA profile
4 from this item is at least 58 octillion times more
5 likely if it originated from John O'Keefe than if it
6 originated from an unknown, unrelated individual. This
7 provides support for an inclusion.

8 Q And, with regard to that stain from the gray
9 long-sleeve tee shirt, again, that was determined by
10 you through your testing to be DNA from a single
11 contributor matching John O'Keefe, correct?

12 A It was determined to be from a single
13 contributor. Yes.

14 Q Now, sir, if I could turn your attention to
15 Item 7-18.14.1. Are you familiar with that item?

16 A Yes.

17 Q And what is the description associated with
18 that item, sir?

19 A Sample from Stain "L" on back bottom right of
20 gray long-sleeve shirt.

21 Q And were you able to generate a DNA profile
22 from that, the sample from that item, as well?

23 A Yes, I was.

24 Q And were you then able to do a comparative
25 analysis between the sample -- profile from that sample

1 versus the profile from Mr. O'Keefe?

2 A Yes, I was.

3 Q And what, if anything, were your findings in
4 relation to that?

5 A So the DNA profile was interpreted as a
6 mixture of two contributors including male DNA. The
7 DNA profile from this item is at least one decillion
8 times more likely if it originated from John O'Keefe
9 and an unknown individual than if it originated from
10 two unknown, unrelated individuals. This provides
11 support for an inclusion.

12 Q And, sir, I am going to ask you or draw your
13 attention to Item 7-18.17.1. Are you familiar with
14 that item?

15 A Yes.

16 Q And what is the description associated with
17 the sample from that item?

18 A Sample from unseen areas of exterior of gray
19 long-sleeve shirt.

20 Q And were you able to also generate a DNA
21 profile from that sample?

22 A Yes.

23 Q And were you able to then do a comparative
24 analysis between the profile from that sample and the
25 profile from Mr. O'Keefe?

1 A I was.

2 Q And what, if any, conclusions did you come to
3 with reference to that comparative analysis?

4 A The DNA profile was interpreted as a mixture
5 of two contributors including male DNA. Contributor 1
6 is suitable for comparison and, due to limited
7 information, Contributor 2 was not suitable for
8 comparison. The DNA profile from this item is at least
9 960 nonillion times more likely if it originated from
10 John O'Keefe and an unknown individual than if it
11 originated from two unknown, unrelated individuals.
12 This provides support for an inclusion.

13 Q Now, sir, there are some other items from
14 which you conducted testing but were not able to
15 generate a profile from, correct?

16 A Correct.

17 Q And, specifically, I'm going to ask about Item
18 7-3.1. That is a sample from the right instep of
19 Mr. O'Keefe's sneaker; is that correct?

20 A Could you repeat that number again, please?

21 Q Sure. Sir, if I could direct your attention
22 to within your DNA Report No. 5. I'm talking about
23 Item No. 9.

24 A Yes.

25 Q And so, sir, with reference to that, what, if

1 any -- there's an indication as far as the mixture not
2 being suitable for comparison due to the quality of the
3 profile, correct?

4 A Correct. It was a mixture of at least five
5 contributors.

6 Q And so from that as far as not suitable for
7 comparison, can you explain to the jury what that
8 means?

9 A Yes. So during our validations, we only
10 validated mixtures up to four contributors because we
11 determined that once you get more than four, at least
12 five contributors into a mixture, it becomes too
13 complex to be able to make any reliable comparisons to
14 that mixture.

15 Q Now, sir, if I could direct you to Item No. 11
16 or Item No. 7-18.3.1 within your report.

17 A Yes.

18 Q And that is a stain from the gray long-sleeve
19 tee shirt, top front?

20 A Yes.

21 Q Now, that is indicated as not suitable for
22 comparison due to the quality of the profile, correct?

23 A Correct.

24 Q And can you explain to the jury what that
25 means as far as not being suitable due to the quality

1 of the profile?

2 A Yes. So during our -- bringing it back to our
3 third step of amplification where we are making
4 millions of copies of specific locations, sometimes
5 there might not be a lot of DNA there and that
6 amplification step might not amplify all the
7 information that could be present and the profile
8 that's generated won't have all the information to be
9 able to reliably make a comparison.

10 So the information that we are able to look at
11 is very limited. So we just do not do any comparisons
12 because they would not be reliable.

13 Q And was that the same as far as not suitable
14 for comparison due to the quality of the profile? Was
15 that the same for two other areas that you tested in
16 regard to the front of or sample from the front of the
17 gray long-sleeve shirt and a sample from the back left
18 sleeve of the gray long-sleeve shirt?

19 A Yes.

20 MR. LALLY: Your Honor, may I have a moment?

21 THE COURT: Yes.

22 BY MR. LALLY:

23 Q Sir, let me ask you just briefly, are you
24 familiar with the term called STRmix?

25 A Yes.

1 Q And can you explain to the jury what that is
2 and how that is involved or how it's implicated within
3 your testing?

4 A Yes. So STRmix is a tool that we use to
5 basically break down complex mixtures into its
6 individual contributors and in a way that would best
7 describe that mixture. And, once it does that, it will
8 then do comparisons and calculate a ratio, which is
9 a --

10 Q And how does that relate to the testing that
11 you did in this case?

12 A I used STRmix on all the samples I had
13 comparisons done to them.

14 MR. LALLY: Thank you, sir. I have no further
15 questions, Your Honor.

16 THE COURT: Ms. Little?

17 MR. LALLY: No questions. Thank you.

18 THE COURT: All right, Mr. Porto. You are all
19 set.

20 (Whereupon, the witness is excused.)

21 THE COURT: May I see counsel at sidebar,
22 please?

23 (Whereupon, there was a sidebar conference as
24 follows:)

25 THE COURT: All right. So that's it for

1 today?

2 MR. LALLY: Yes.

3 THE COURT: Okay. So I'd like to give them
4 some idea on where we stand. I think even if I
5 just say that the estimate, when I told them last
6 week that they would get this case by the last week
7 of this month, we are still on target for that,
8 right?

9 MR. LALLY: I would say so, yes. `

10 THE COURT: All right. So I want to excuse
11 them and then I want to talk to you about a couple
12 of things at sidebar. So you can go back.

13 (Whereupon, the sidebar conference concluded.)

14 THE COURT: So we are actually going to send
15 you home today because we are on schedule. It is
16 beautiful out. Rather than start with the witness
17 that we'll start with tomorrow morning, it makes
18 sense -- I'm going to talk to the lawyers for a few
19 minutes. So we will send you home.

20 Do not discuss this case with anyone. And,
21 just so I'm clear, that means each other. That
22 means any aspect of this case, any observations,
23 anything at all. Do not do any independent
24 research or investigation into this case. If you
25 happen to see, hear or read anything about this

1 case, please disregard it. We expect a full day
2 tomorrow. So we'll see you tomorrow.

3 (Whereupon, the jury is escorted from the courtroom
4 and excused for the day.)

5 THE COURT: All right. I'll see counsel at
6 sidebar about a couple of issues.

7 (Whereupon, there was a sidebar conference as
8 follows:)

9 **Court Order: Jurors or Juror Issues**
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Court Order: Jurors or Juror Issues

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Court Order: Jurors or Juror Issues

Court Order: Jurors or Juror Issues

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Court Order: Jurors or Juror Issues

MR. YANNETTI: A question. You mentioned to the jury that you expect a full day tomorrow. Does that mean that you don't anticipate doing a voir dire?

1 THE COURT: I'd rather tell them a full day
2 and let them go, rather than have some people think
3 -- because I couldn't remember whether I told them
4 we were definitely going a full day Friday or maybe
5 stopping for this voir dire. So I just figured
6 that -- and then they won't be unhappy to leave.

7 THE COURT: All right. Anything else?

8 MR. LALLY: No, Your Honor.

9 THE COURT: And Jimmy tells me you will have
10 your grand jury minutes for me -- I mean your jury
11 instructions for me tomorrow?

12 MR. JACKSON: Yes. We've sent notice to get
13 those underway and get them done by tomorrow. So
14 yes. Our anticipation is that we will have a
15 packet for you tomorrow.

16 MR. LALLY: We will, yes.

17 MR. YANNETTI: Can I ask on that score, Your
18 Honor, are you -- there are model instructions with
19 regard -- you don't want reasonable doubt and all
20 the other stuff? It's just --

21 THE COURT: Whatever you want to give me.
22 Whatever you want to give me. I can read the
23 reasonable doubt instruction.

24 MR. YANNETTI: I think you've done it before.
25 Yeah.

1 THE COURT: So whatever you want to give me
2 and let me know at some point. We'll have the
3 formal charge conference, but I think your
4 instructions will give me some idea of whether you
5 want lesser included.

6 MR. JACKSON: Okay.

7 MR. LALLY: Okay.

8 MR. YANNETTI: That sounds good. Thank you.

9 THE COURT: All right. Thank you. We'll see
10 you tomorrow.

11 MR. LALLY: Thank you, Your Honor.

12 (Whereupon, the sidebar conference concluded and
13 the Court adjourned.)
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C E R T I F I C A T E

I, Paula M. Mills, retired certified court reporter, do hereby certify that the foregoing pages, page 30-3 to 30-247, is a true and accurate transcription of the voice recording in the aforementioned matter to the best of my skill and ability.

This, the 26th day of December, 2024.

\s\ Paula M. Mills

Paula M. Mills

Retired Certified Court Reporter
and Court Transcriptionist